

To my Mother and Father

INTERNAL MIGRATION IN GUYANA :
THE CHARACTERISTICS, CAUSES AND IMPLICATIONS

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DECLARATION

I declare that this thesis is my own work.

Prakash Singh
May 1981

ABSTRACT

This is a thesis on internal migration in Guyana. It begins by presenting a theoretical review of migration. The characteristics of migrants, their motives for migrating, the decision-making process which migrants undergo and the implications of migration are outlined. Of the various models of migration examined the 'expectation of income' model of M P Todaro seems to be the most acceptable model with the suggestion that it should include decision-making of the family rather than of the individual only.

The reader is introduced to Guyana. The early history and geography of the country are briefly described. Population growth in the post-indentureship period (1918) is analysed, noting its changing structure, spatial distribution, and the labour-force employment and unemployment. Also, recent administrative and political developments and the country's post-war direction of planning are outlined and their implications to population mobility discussed.

Using the data from the 1970 Population Census and relevant data in agriculture, rural production, employment, education and urbanisation the following observations are made. 1) The social and demographic characteristics of Guyanese migrants are no different from those observed in other Developing Countries. 2) The great majority of migrants proceeded directly towards Georgetown, the country's main (primate) city. 3) The main cause of rural out-migration is rural underdevelopment which stems from the poverty of agriculture, the lack of alternative rural employment opportunities, poor rural services, and the more or less universal primary and substantial secondary education which serve to dis-associate the rural labour force from the land and to raise rural expectations. 4) Although rural-urban migration confers both benefits and disadvantages to the sending and receiving areas the evidence shows that it is by no means an equilibrating mechanism as it is thought to be. Rural-urban migration is observed to increase urban-rural inequality. Specifically, it represents a

severe drain on rural resources and increases the degree of stagnation and level of poverty there. In urban areas it adds to unemployment and congestion and exerts a pressure for expanding social and welfare services.

In view of the adverse effects of migration on development in Guyana, the thesis presents a package of policies intended to bring about a reduction in the rate of migration and to minimise its harmful effects. The main policies suggested are those required to accelerate rural development and include a program of land and tenancy reforms which involve the redistribution of land and appropriate tenancy measures to ensure that those who work on the land receive its benefits.

To ensure that this happens supplemental policies to land reform such as the provision of credit, adequate extension and marketing facilities are suggested. Also to deter migration, an increase in rural employment opportunities and an improvement in social services and utilities are recommended. Finally, some policy directions are suggested as to the re-orientation of education and in regard to population and urban wage policies.

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CONTENTS

| | <u>Page</u> |
|--------------------------------|-------------|
| Declaration | i |
| Abstract | ii |
| Acknowledgements | iv |
| Contents | v |
| List of Tables in Text | viii |
| List of Tables in Appendix III | x |
| Introduction | xii |

CHAPTER I INTERNAL MIGRATION : A THEORETICAL REVIEW

| | |
|--|----|
| 1. Introduction | 1 |
| 2. Migration Overview | 1 |
| 3. A Definition of Migration | 2 |
| 4. The Causes of Migration | 4 |
| 5. Characteristics of Migrants | 8 |
| (i) Migrant Selectivity | 8 |
| (ii) Age | 8 |
| (iii) Sex | 9 |
| (iv) Marital Status | 9 |
| (v) Educational Attainment and Propensity to Migrate | 10 |
| (vi) Occupational Status | 10 |
| (vii) Innovatedness and Propensity to Assume Risks | 11 |
| 6. The Theory of Migration Decision | 12 |
| 7. The Applicability of Models in Developing Countries | 16 |
| A: The Gravity Model | 16 |
| B: Economic Oriented Models | 17 |
| (i) The Descriptive Model | 17 |
| (ii) The Lewis-Fei-Ranis Model | 18 |
| (iii) The Human Capital Approach Model | 19 |
| (iv) The Expectation of Income Model | 20 |
| C: Some Policy Implications of the Todaro Model | 22 |
| 8. The Implications of Internal Migration | 23 |
| A: Some Theoretical Views | 23 |
| (i) The Neo-Classical View | 23 |
| (ii) The Convergence of Per-Capita Income View | 25 |
| (iii) Cumulative Causation View | 27 |
| B: Private Returns of Migration | 28 |
| C: General Effects of Migration on Sending and Receiving Areas | 29 |

| | <u>Page</u> |
|--|-------------|
| CHAPTER II AN INTRODUCTION TO GUYANA | |
| 1. Introduction | 33 |
| 2. Geography and Natural Resources | 33 |
| 3. Early Settlement and Labour Force Orientation | 35 |
| 4. Population Growth | 40 |
| (i) Slave and Indentureship Period | 40 |
| (ii) Period of Transition | 43 |
| (iii) Period of Rapid Population Growth | 44 |
| (iv) Period of Stability | 45 |
| 5. Some Characteristics of the Population | 46 |
| (i) Structure and Dependence | 46 |
| (ii) The Spatial Distribution of Population | 47 |
| (iii) The Guyanese Labour Force | 49 |
| (iv) Employment and Unemployment | 51 |
| 6. Administrative and Political Developments | 54 |
| Implications for Migration | 57 |
| 7. Post-War Planning in Guyana | 59 |
| Implications for Migration | 65 |
| CHAPTER III THE CHARACTERISTICS, CAUSES, PATTERNS AND IMPLICATIONS OF INTERNAL MIGRATION IN GUYANA | |
| 1. Introduction | 67 |
| 2. Extent of Inter-Rural and Rural-Urban Migration in Guyana | 68 |
| (i) The Origin of Guyanese Migration | 68 |
| (ii) Migrants in the Population | 69 |
| 3. Characteristics of Guyanese Migration | 70 |
| (i) Age of Migrants | 71 |
| (ii) Migrants by Sex | 72 |
| (iii) Migrants by Ethnicity | 72 |
| (iv) Migrants by Education Attained | 74 |
| (v) Migrants by Occupational Status | 75 |
| (vi) Migrants by Mobility and Distance Travelled | 76 |
| 4. Causes of Internal Migration in Guyana | 77 |
| (i) Institutional Factors | 78 |
| (ii) Economic Factors | 79 |
| (iii) Social Factors | 82 |
| (iv) Psychological Factors | 84 |
| (v) Other Factors | 85 |
| 5./ | |

| | <u>Page</u> |
|---|-------------|
| 5. Period of Entry of Migrants | 85 |
| 6. The Patterns of Migration | 89 |
| 7. Implications of the Rate and Pattern of Rural-Urban Migration in Guyana | 99 |
| 8 Conclusions | 109 |

CHAPTER IV POLICIES TO ARREST RURAL-URBAN MIGRATION

| | |
|---|-----|
| 1. Introduction | 110 |
| 2. Recent Trends in the Economy | 110 |
| 3. Causes of Recent Decline | 117 |
| (i) The Sugar Industry | 118 |
| (ii) The Bauxite Industry | 122 |
| (iii) The Rice Industry | 123 |
| (iv) Other Foodcrop Production | 134 |
| (v) Livestock Production | 135 |
| 4. The Need to Arrest Rural-Urban Migration | 138 |
| 5. Policies to Arrest Rural-Urban Migration | 140 |
| 6. Conclusions | 151 |

FOOTNOTES

| | |
|---------------------|-----|
| Notes : Chapter I | 152 |
| Notes : Chapter II | 161 |
| Notes : Chapter III | 166 |
| Notes : Chapter IV | 177 |

APPENDICES

| | |
|-----------------------------------|-----|
| Appendix I Description of Areas | 183 |
| Appendix II Maps | 187 |
| Appendix III Statistical Appendix | 191 |

BIBLIOGRAPHY

| | |
|---------------------------------------|-----|
| Bibliography I Works Cited | 210 |
| Bibliography II Other Works Consulted | 222 |

LIST OF TABLES (in Text)

| | <u>Page</u> |
|---|-------------|
| Table 1 : Population at Census Dates 1841-1970 | 42 |
| " 2 : Immigrants to Guyana Mainly Under Indenture 1834-1918 | 43 |
| " 3 : Birth Rate, Death Rate, Rate of Natural Increase and Infant Mortality Rate per 1000 Population 1946-1970 | 44 |
| " 4 : Structure of the Population 1946-1970 | 46 |
| " 5 : Age Dependency 1946-1970 | 47 |
| " 6 : Percentage Distribution of Population by Counties 1931-1970 | 49 |
| " 7 : Distribution of Working Population by Industrial Group 1946-1970 | 51 |
| " 8 : Labour Force, Employment and Unemployment 1946-1970 | 52 |
| " 9 : The Five Year Government Development Programme 1954-58 as Recommended by the IBRD Mission | 61 |
| " 10 : The Development Programme, 1960-1964 | 63 |
| " 11 : Comparing Rural-Urban Migration to Georgetown with Next Most Popular Destination 1970 | 90 |
| " 12 : Migrants to Georgetown and its Environs by Place of Origin of Migrants 1970 | 91 |
| " 13 : Rural Out and Return Migration to (and from) Georgetown 1970 | 93 |
| " 14 : Net Out-Migration from Rural Areas Ranked by Proportion of Population Involved in Agriculture 1970 | 95 |
| " 15 : Rates of Gross Out-Migration from Rural Areas Ranked by Proportion of Africans in the Population 1970 | 98 |
| " 16 : Gross Domestic Product at Current Factor Cost 1970-1980 | 111 |
| " 17 : Production of Sugar and Bauxite in the First and Second Half of the 1970-1980 Decade | 112 |
| " 18 : Imports and Exports of Goods and Services and Balance of Payments 1970-79 | 112 |
| " 19 : Number of Strikes, Man Days Lost and Production Shortfalls 1978, 1979 | 114 |
| " 20 : Indices of Production 1965-1979 | 115 |
| " 21 : Acreage Harvested and Sugar Produced 1950-1979 | 120 |
| " 22/ | |

| | <u>Page</u> |
|---|-------------|
| Table 22 : Land Distribution by Size of Rice-Holdings in 1962 and all Agricultural Holdings 1977 | 126 |
| " 23 : Acreage Reaped and Production of Rice 1946-1975 | 128 |
| " 24 : Imports of Agricultural Machinery 1960-1974 | 129 |
| " 25 : A. Prices and Cost of Paddy Production 1953-1975 | 132 |
| B. Cost of Agricultural Machinery | 132 |
| " 26 : A. Livestock Production 1965, 1970, 1975 | 135 |
| B. Per-Capita Consumption of Meat, Milk and Eggs 1975 | 136 |

STATISTICAL APPENDIX III

LIST OF TABLES

| | | <u>Page</u> |
|-------|--|-------------|
| Table | 1 East Indian Infant Mortality Rate 1939-1960 | 191 |
| " | 2 Proportion of Women of all Conjugal Conditions who Reached Motherhood by Age and Ethnic Group 1946 | 191 |
| " | 3 Population of Guyana by Age Group 1946, 1960, 1970 | 192 |
| " | 4 Net Population Increase and Migration | 193 |
| " | 5 Showing Location of the Two Main Ethnic Groups by Major Urban and Rural Areas, 1970 | 194 |
| " | 6 Internal Migrants to Place of Residence by Educational Attainment by Major Area 1970 (Percentage) | 195 |
| " | 7 Internal Migrants by Number of Moves to Place of Residence by Major Areas, 1970 | 196 |
| " | 8 Showing Total Migrants by Period of Entry by Major Areas 1970 | 197 |
| " | 9 Showing Migrants in the Population 1960 and 1970 by Major Area of Usual Residence | 198 |
| " | 10 Showing Total Migrants Entering During 1960-1970 Inter-censal Period by Major Regions | 199 |
| " | 11 Comparing Migrants with Resident Population by Level of Education Attained, 1970 | 200 |
| " | 12 Migrants to Place of Residence by Major Division by Major Occupation, 1970 | 201 |
| " | 13 In-Migrants to Georgetown by Place of Birth, Out-Migration to Place of Residence and Net Migration, 1970 | 202 |
| " | 14 In-Migrants to East Bank Demerara by Place of Birth, Out-Migration to Place of Residence and Net Migration 1970 | 202 |
| " | 15 In-Migrants to East Coast Demerara by Place of Birth, Out-Migration to Place of Residence and Net Migration 1970 | 203 |
| " | 16 In-Migrants to West Demerara by Place of Birth, Out-Migration to Place of Residence and Net Migration, 1970 | 203 |
| " | 17 In-Migrants to Upper Demerara River by Place of Birth, Out-Migration to Place of Residence and Net Migration 1970 | 204 |
| " | 18/ | |

| | | <u>Page</u> |
|----------|---|-------------|
| Table 18 | In-Migrants to West Berbice by Place of Birth, Out-Migration to Place of Residence and Net Migration 1970 | 204 |
| " 19 | In-Migrants to New Amsterdam by Place of Birth, Out-Migration to Place of Residence and Net Migration 1970 | 205 |
| " 20 | In-Migrants to Rest of Berbice by Place of Birth, Out-Migration to Place of Residence and Net Migration 1970 | 205 |
| " 21 | In-Migration to Essequibo Coast and Islands by Place of Birth, Out-Migration to Place of Residence and Net Migration 1970 | 206 |
| " 22 | In-Migration to Interior Districts by Place of Birth, Out-Migration to Place of Residence and Net Migration 1970 | 206 |
| " 23 | Guyana - Government Investment in Agriculture 1954-1976 | 207 |
| " 24 | Guyana Rice Production, Acreage and Yields 1946-1975 | 208 |
| " 25 | Population by Place of Birth and Place of Residence, 1970 | 209 |

INTRODUCTION

INTRODUCTION

It is said that most people who write about migration are not interested in migration at all but in its consequences. This is quite natural since it is because of the consequences that remedial action is necessary. (Sabot, 1979 : 4). If migration had only beneficial effects, as the traditional theory suggests, then it would have been a welcome process. But unfortunately the effects are not all so. In fact there is still considerable controversy about whether the effects are beneficial or disadvantageous, or which outweighs the other in cases where both are evident.

In the traditional theory migration is the "facilitating factor" that promotes economic efficiency by rearranging workers to increase the national output (Morrison, 1977 : 70). This implies that migration eventually brings about an improvement in the welfare of the entire society. But the way in which migration was supposed to have done this presupposes a number of conditions that do not really exist. One such presumption is that labour is a homogeneous factor when in fact it consists of "a variety of grades" (Berliner, 1977 : 449). Since it is generally accepted that it is the high grade labour in a region that is most likely to emigrate, then productivity and wages in that region would decline as out-migration occurs. Also, since scarce resources such as capital are not motivated to relocate in out-migrating and declining regions and since income redistribution and expenditure on services are usually biased towards urban or in-migrating areas, migration in this sense is no longer a pareto-optimal redistribution or an equilibrating mechanism that it is thought to be. Moreover, since migration is a response to rural-urban differences in expected incomes, as suggested by Todaro (1969), migration progressively disadvantages sending areas.

This, however, does not necessarily mean that migration may not, in some cases, be a highly beneficial process. Indeed, as Sovani (1969), Elizaga (1975), Li (1976) and others argue, since migration is the efficient

allocation of scarce resources it is instrumental in accelerating economic growth and development. That the out-migrating areas seem to be disadvantaged is the fault of the distribution system and is not due to migration per se. In theory the above role and function of migration seem logical, but whether in practice this is or is not so, as mentioned, is highly contentious. One factor is certain, though: in the interim (if migration is beneficial in the long run), or if it is a part of a progressively deteriorating process, the effects on agrarian economies can be extremely acute.

In these economies, due to their widespread inequality, poverty and an education system which has a clear urban bias, migration from rural areas has two main effects. It encumbers the small modern sector by raising the level of unemployment and demanding greater resources for social and welfare services. At the same time it contributes to a decline in agricultural productivity and in total output on which the economy largely depends for survival and growth. One typical case seems to be Guyana, a poor developing country in South America.

Over the last three to four decades development in the country has had a strong urban bias. Little more than token attempts were made to develop rural agriculture and improve rural conditions of life. Education, which was more or less universal, has served to dissociate many Guyanese from the 'land' and to heighten their expectations - the result of which was a fairly high and increasing rate of rural out-migration.

Considering the resources available and other constraints to development, the a-priori assumption is made here that rural out-migration at its recent and present rate was and is more harmful than beneficial to development in the country. In view of the fact that there has not been an in depth appraisal of migration in Guyana, this thesis attempts to do this with the aim of enquiring into the circumstances and consequences of Guyanese migration. If, as expected, given the nature of the economy and the characteristics of the people, the direct and indirect consequences of migration are deleterious to growth and development, then a suitable package of policies will be presented to obviate the adverse effects of rapid rural-urban migration.

The thesis is presented in four sections (Chapters). Chapter One is intended to be a theoretical review of migration. It begins by presenting a brief overview and definition of migration. It then outlines the broad causes of the phenomenon as it occurs mainly in the Developing World. Thirdly, it elaborates somewhat on the theory of migration-decision. It outlines and examines the various theories and models of human migration. The Chapter concludes by discussing the neo-classical and contemporary views of the consequences of migration to the migrants themselves and to the sending and receiving areas.

Chapter Two is an introduction to Guyana. It begins by giving an idea of its geography and early history, emphasising in particular the early orientation of its labour force. Secondly, it presents some relevant population data. The causes and extent of population growth, its structure, spatial and occupational distribution and labour force employment and unemployment are analysed. Thirdly, a brief summary of recent administrative and political and planning development is then presented. In each case their implications for population mobility are briefly discussed.

Chapter Three analyses the characteristics of migrants, the causes of internal migration, the pattern in which it occurs, and finally its consequences in Guyana. Firstly, the extent of internal migration in Guyana is shown. Secondly, on the basis of the foregoing information on Guyana, some hypothetical deductions are made as to the age, sex, ethnicity, education and occupations of migrants. The analysis then proceeds to examine the data on internal migration and to verify or annul as the case may be these deductions. Thirdly, from a variety of direct and indirect sources the broad causes of migration are presented under the headings of institutional, economic, social, psychological and other factors causing migration. Fourthly, the period of entry of migrants is then presented to give an indication of the time of in- (and out-) migration. Fifthly, the pattern and rate of out- (and in-) migration by population districts is then analysed. This is done by positing a number of hypotheses and using the data to verify

or disprove each. Finally, the Chapter concludes by analysing in some detail the implications of the characteristics, rate and pattern of rural-urban migration in Guyana.

In Chapter Four it is intended to present a package of policies designed to arrest the rate of rural-urban migration and to minimise its adverse effects on development. First, as a result of the harmful effects of migration catalogued in the previous chapter, the recent trend of decline in the economy is presented. Specifically, the reasons attributing to the decline, which originate directly and indirectly from the main reasons stimulating rural out-migration, are outlined, and on the basis of this a package of policies that is considered essential to reverse the harmful effects of rapid urban migration and to re-create a momentum for national economic growth and social development is presented.

The Data, Scope and Methodology

This study is limited to a descriptive analysis of internal migration in Guyana.

Its scope is limited by the severe absence of relevant data, a feature that is more or less endemic in poor developing countries. Nevertheless, using its limited data base, it attempts to present a generalised picture of internal migration and its consequences in Guyana.

On the theoretical aspects of migration, the thesis draws from the vast literature on the subject. Wherever it is relevant empirical studies in the Developing World are used to substantiate observations or for comparisons or references. The data on the extent, pattern and rate of internal migration was obtained from the 1960 and 1970 population censuses. Information on the causes and consequences of migration is obtained from the author's personal experience as a Guyanese and from his experience working as a research assistant for some time on an ILO/IDS (University of Guyana) Labour Mobility Study* and from a number of indirect sources.

* This study has not been completed as yet.

Because of the lack of specific and quantitative data it is only possible to conceive an outline of the policies needed to arrest and minimise the adverse consequences of rapid rural-urban migration.

Planning Implications

Due to the unfavourable effects of rural-urban migration in Guyana, as a dependent underdeveloped economy, it is imperative that appropriate remedial action is undertaken to reduce the rate and effects of rapid migration. The absence of such action not only in Guyana, but in all poor developing countries where urban migration has had adverse effects, will lead to prolonged stagnation, and a reversal of growth into decline with severe economic and social implications.

CHAPTER I

INTERNAL MIGRATION : A THEORETICAL REVIEW

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INTERNAL MIGRATION : A THEORETICAL REVIEW

1. Introduction

This chapter intends to present a theoretical review of internal migration. It begins with a brief overview of the phenomenon attesting to its occurrence. A definition is given and some of the main factors causing it are outlined. The principal migrant characteristics are then identified. Although examples are drawn mainly from Developing Countries it is thought that the character traits are broad enough to apply in all countries. The next section outlines a few of the more well-known theories of migration and proceeds to discuss the relevance of the models derived from these to migration in the Developing Countries. The chapter concludes by outlining some of the implications of rapid rural-urban migration to the persons making the move and to both the receiving and donor areas.

2. Migration Overview

Because migration has to do with humans it has always been a subject of immense interest¹. Often, it has been regarded as the process that enables man to overcome the "tyranny of space", ... "to correct rural-urban, inter-urban and regional imbalances" (Myers and Spengler, 1977 : 11). While it fulfils these roles, migration mobilises and re-directs productive resources, i.e. labour and capital, to locations where its marginal utility is highest. In the process, receiving areas tend to benefit from employment created and its concomitant benefits. Receiving areas also stand to gain from employment creation and various 'backwash effects'. Given time a situation approaching equilibrium is likely to be reached in which both urban and rural resources are optimally utilised and incomes would move towards an

equalisation. But, however, migration, by itself, is not an independent process, a dysfunctioning of any of its component processes can lead to a situation whereby migration can accentuate rural and urban inequality (Myrdal, 1957) rather than being an equilibrator.

In the study of migration the approach of the various disciplines differ in more or less the same manner as their contents differ². Social psychologists, Anthropologists and Sociologists interested in mental health, culture, and societal changes respectively tend mainly to view migration from their respective viewpoints. Demographers regard it as locational shifts of population which signify changes in the rate of fertility with implications to rural and urban areas. Geographers see it as a change in the spatial location of population and tend to be interested in the process in which this occurs. Economists, on the other hand, tend to enquire into the principles governing such spatial relationships and tend to regard the movement in a costs-returns framework³, or in terms of the consequences of such a framework.

3. A Definition of Internal Migration

As a consequence of its multi-disciplinary enquiry migration has been variously described. From a purely economic viewpoint, it is seen as "a mechanism of adjustment of the population to economic opportunities" (Elizaga, 1975 : 402). From a slightly broader perception, it is regarded ... "as a voluntary movement through socio-cultural spaces occurring along a geographical vector and includes movement along an economic vector, from one set of economic opportunities to an other" (Myers and Spengler, 1977 : 14). However, the definition taken for the purposes of this study is that adopted by the United Nations in which it is regarded as ... "the geographic mobility of persons between areas involving a change of residence over a specific period of time"⁴.

Migration according to this typology is not new. Whether by free choice or voluntary transfer ... "such movements have characterised the history of

mankind" (Kubat, 1976 : 11). Viewing two regions of the world, i.e. Europe and Latin America, it will be seen that migration played and still plays a singularly important role in the development of each of these regions. In Europe, prior to the eighteenth century, migration was to a great extent the product of various disasters, i.e. wars etc. Later however, it occurred mainly as a response to changing social, economic and political conditions⁵. The agricultural, followed by the industrial revolution resulted in massive internal shifts of rural agrarian-based populations to urban areas and to centres of industrial activity. Concurrent with the internal move, political, economic, ethnic and reasons of empire building etc. led to an enormous volume of inter-regional and inter-national out-flows (mainly inter-continental)⁶.

More recently, since the end of the second world war, internal migration became a powerful and a 'universal' movement. Urban areas of nearly all countries in Western Europe received substantial out-flows from their rural areas⁷. Taking the region as a whole, its post-war labour demands drew the surplus labour of the entire surrounding region into 'one vast labour market'. With the signing of various bilateral agreements whereby rapidly developing economies were assured of a steady supply of labour from those in which it was a surplus, and the freeing of restrictions on inter-Community mobility have led to an enormous volume of labour mobility within the region⁸. In 1976 it has been estimated that there was a gross annual movement of between 2-3 million persons and that the 9 million foreign workers and their dependents would increase to 22 million by 1980 (Salt, 1976 : 82).

In Latin America each country has a history of in-migration. As late as the early twentieth century countries such as Brazil, Argentina, Uruguay and Venezuela continued to receive large in-migrations of Europeans⁹. Inter-regional movement as has occurred in Western Europe was not as important in these countries but nevertheless, there were substantial internal population shifts from the relatively slowly developing regions to those that were more developed and had higher rates of growth, i.e. a shift to the South in Brazil; to the North East in Argentina; to the oil producing regions of Venezuela etc. But however, the most important population

movement was rural to urban migration¹⁰. Within the last thirty years the average proportion of population in urban areas has risen from less than 40% to more than 60% in some countries which places Latin American urbanisation slightly below that of Europe and North America and significantly higher than that in Asia and Africa¹¹.

4. The Causes of Internal Migration

Despite the fact that the causes of migration or migrant motives may be extremely diversified and that in each move several reasons may operate, the move, when it occurs, is basically because the migrant has reason to believe that by migrating he can improve his condition and that of his family (Schultz, 1971 : 158). Such motivations, as Schultz mentions, originate from the migrant's awareness of his environment in relation to others within the ambit of his knowledge. Assuming that migrants are rational individuals, as the studies of Beals, Levy, and Moses (1967) and Sahota (1968) seem to indicate, then the move to a specific destination indicates that that area offers the possibility of higher gains than origin or alternative areas in terms of the specific migrant limitations. Also, since 'gains' are usually measured in terms of higher earnings, places of higher earnings or those having the greatest urban-rural income differentials are most likely to have higher rates of in-migration¹². Hence the principal cause of rural (and urban) migration to those places is the opportunity or expectation of higher income. A number of other variables in which the economic motive is central are outlined below.

In economies where most people earn their living off the land, the availability of land is a critical factor that determines whether they migrate or not. A number of studies have shown that a positive relationship exists between high man/land ratios and the propensity to migrate (Connell et al, 1976 : 7-8). But however, the relationship depends on the quality of the land and the type of agriculture practised. Geertz, in Indonesia, and Fulis and Vingerhoet in Thailand, found that there were relatively fewer migrants from

the more densely populated villages¹³. In other studies heavy emigration was observed from sparsely populated areas due mainly to soil erosion and related factors¹⁴. Because income from land is usually the main source of rural income then the 'poverty of agriculture' in certain areas stimulates migration. The inclusion of rural areas in a monetised economy necessitates the practice of cash cropping. If however because of land scarcity, repeated crop failures, low demand and consequently low profits, rural incomes fall below the poverty line then rural out-migration, either seasonal or permanent, occurs¹⁵.

The impact of technology in agriculture has been one of the principal causes of rural out-migration. The need for money, as shown above, has led to the decline of subsistence agriculture and the rise of cash cropping to which mechanisation has been a natural input. As a consequence, the demand for rural labour is drastically reduced and is limited to seasonal 'jobs'. Rural persons who own uneconomic parcels of land or who are landless and depend on casual farm labour are forced to migrate as increasing mechanisation makes them redundant¹⁶.

In a good many of the poor Developing Countries rural-urban migration has historical antecedents. The impact of colonialism and the creation and persistence of dual economies in these countries have resulted in distinct regional inequalities and a social structure that is biased towards the modern (urban) economy. To this effect, Exeter presents Singer's argument that the 'capitalist relations of production', employed originally by the Colonialists, and the natural population growth in rural areas created a relative scarcity of arable land. In the case of Latin America the extreme concentration of land ownership was a major cause of rural migration (Exeter, 1976 : 5-6). In other areas, such as Africa, the advent of Colonialism has resulted in a large rural landless proletariat most of whom have few ties in terms of property or employment and have few alternatives other than to migrate to urban areas.

The size of rural families, their structure, family wealth and their social status among families in the rural community exert a strong

influence on out-migration. Most indications are that migrants tend to come from large families (Connell et al, 1976 : 45). Broad based families tend to promote migration in contrast to tightly knit 'rural oriented' families. Kinship and, to a lesser extent, communal or ethnic ties in destination (urban) areas, as shown by Gugler (1975 : 295) induces further migration. Because costs of migration to the rural poor are often prohibitive more migrants tend to originate from wealthier households¹⁷. Often, such households, in order to maintain their social standing in the community, subconsciously prepare children for urban migration. If benefits from a former migration to the family at home are very noticeable so as to cause some disruption in the community's social relations other families tend to react by encouraging members of their household to migrate with the hope of receiving similar benefits¹⁸.

The proximity of rural communities to urban areas tends to have a strong influence on the rate and volume of rural-urban migration¹⁹. Because proximity leads to more urban contact, a greater amount of relevant information is available. Both direct and indirect costs of moving tend to be less than from the more spatially distant communities. Also, rural communities within the general threshold of urban influence tend to benefit from the superior urban facilities of education, job training, etc. and are thus more conducive to urban ways of life and so better equipped for urban employment. Thus there is a tendency for a greater proportion of migrants to come from rural areas in close proximity to towns - which affirms the distance postulate of Ravenstein (1885)²⁰. However this is by no means the universal pattern. High urban living costs may deter the migration of individuals who live within reasonable proximity, to commute instead of migrating²¹.

In some of the poorer countries present migration tends to be a function of past migration. This tends to be so because a substantial proportion of migrants in backward areas of poor countries tend to be relatively unskilled and uneducated. Because rural employment and other prospects seem 'bleak,' in view of the possibilities that are seen to exist in urban areas, the presence of kin or close contacts there provides a strong incentive to

migrate. Often, the initial migrations serve to generate 'chain' migration²². Even in the Developed Countries the unfamiliarity of urban environments, length of time involved in job search, scarcity and cost of urban housing, etc. make it easier for the second migrant from a household to migrate to join a former. Hence the presence of the first migrant in this case motivates migration of the second migrant, if conditions are that migration should take place. Thus, the decision to migrate can be influenced by the presence of relatives in urban areas. Often, migration takes place from greater 'effective' distances, invalidating to an extent the intervening and step migration hypothesis of Stouffer and Lee²³.

A few of the earlier studies in migration hypothesised that migrants are attracted by the 'bright lights' of the city. However, such notions are unfortunately vague. Non-quantifiable benefits such as "the anonymity variety, fast pace, liberality, modernity and the complexity of urban surroundings" ... was found by Sabot (1976) to appear relevant in stimulating rural-urban migration. Villagers may even migrate for special forms of consumption (Connell et al, 1976). Rural individuals in receipt of reasonably high rural incomes resulting from higher education and skills etc. are eventually influenced by urban lifestyles to migrate. Generally, apart from the main motive of employment opportunities, complementary benefits envisaged from the wide array of urban services, facilities, business possibilities, etc. compared to that in rural areas are additional incentives for rural-urban migration to take place.

Costs of moving exert a determining influence on migrants' decision to move and even determine destinations. Connell et al quote three studies attesting to the formidable element of direct costs in determining movement and destination²⁴. Any reduction of the cost of transport or easier access to urban areas then are strong motives to migrate as this increases net returns from migration. A number of other (subsidiary) factors such as the destination factors of Bogue (1959 : 499-500) i.e. marriage, graduation, job offers and transfers etc. result in migration. In addition, instances of political instability and unrest as they occur throughout the globe, violence of the kind described by Schultz (1971) in Columbia, and active warfare, as

in parts of Latin America, Africa and South Asia are all powerful agents impelling migration from afflicted areas. Finally, the characteristics of migrants, their age, sex, marital status, level and type of education, risk-taking propensity, etc., each occurring in combination with others serve as motives for rural-urban migration.

5. Characteristics of Migrants

Since this paper is concerned with migration as it occurs in one of the poor Developing Countries it is considered relevant to present the common characteristics of migrants in this group of countries. As such, this section draws, to a great extent, on the work of researchers in Latin America, Africa and Asia.

(i) Migrant selectivity

"Migration is a highly selective process. Migrant characteristics usually differ from those of non-migrants ... at the place of origin and destination." (Zachariah, 1977 : 127). Migrants are generally thought to be young persons who are usually more educated, more innovative, and are more prone to risk taking than their origin populations. Also, ... "they tend to possess a very keen perception to their milieu in terms of cultural, linguistic and potential land use variations." (Ng, 1976 : 185). Although all migrants do not have identical traits the similarities are broad enough to be termed universal.

(ii) Age

Migrants generally tend to be young adults mainly in the age-group 15-40 years. However, some variations do occur. Migrants in Latin America tend to be slightly younger (Browning, 1971 : 285) than in Asia or in the developed world where, as was shown in the case of North America, return migration is prominent (Lamont and Proudfoot, 1976 : 229) and this tends to

raise the average age at which migration occurs. However, to the general pattern this variation is negligible. One underlying reason as to why migrants tend to predominate in this age-group might be, as Browning (1971) using Latin American evidence suggests, that potential migrants seem to be keenly aware of the relationship of age to success in the city.

(iii) Sex

While age specificity holds up remarkably well through space and time male/female ratio, contrary to Ravenstein's 7th law, does not. According to Ravenstein females are more migratory than males (Ravenstein, 1885 : 167-235). In the more developed world females tend to be slightly more migratory than males (Hollmann, 1977 : 358-364; Clout, 1976 : 41). In the developing world two patterns emerge. In the Latin American rural-urban migration females generally exceed males (Gilbert, 1974 : 113; Browning, 1971 : 287) while the converse is true in the African (Harvey, 1976 : 157) and Asian migrations (Gosal and Krishan, 1976 : 200; Li, 1976 : 87).

(iv) Marital status

The marital status of migrants is related to their sex-balance. The further the sex ratio is from 100 the greater the proportion of migrants who are single. The rate of migration of married persons or those in established conjugal relationships depends on their willingness to leave their families at home. In Asia and Africa this is more common than in Latin America (Browning, 1971 : 288). Single males tend to have a higher propensity to migrate as was found in Ghana (Caldwell, 1969 : 76). In some areas, e.g. in India, females feature significantly in rural-rural migration because of reasons of marriage, but rural-urban flow tends to be distinctly male excessive (Gosal and Krishan, 1976 : 206). Generally, rural-urban migrants are 'disproportionately' single when compared to the populations from which they originate.

(v) Educational attainment and propensity to migrate

A number of studies, e.g. the Bombay Migration Study of Zachariah (1966), the Brazilian Study of Sahota (1968), the Monterrey Study of Browning and Feindt (1970), Sabot in Tanzania (1979) and others have found that migrants generally have a higher level of educational attainment than the populations from which they originate. Because of the overall 'attributes' of education it seems obvious that individuals with a higher level of education should move or want to do so to where 'better conditions of life' can be found²⁵. In fact this movement among the rural educated is, according to Todaro, one of the more consistent findings of rural-urban migration (Todaro, 1976 : 27).

In a number of studies there seems to be a clear association between the level of completed education and propensity to migrate²⁶. This seems to be so because education, in many countries, is a highly marketable commodity. Schooling, according to Connell et al, was used specifically in some Indian villages to gain better employment (Connell et al, 1976 : 61). The effect of educational attainment on migration is best shown by the studies of Caldwell and Sabot in Africa. In Ghana, Caldwell found that males with secondary education were between two to three times more likely to migrate than those without (Caldwell, 1969), while Sabot, in Tanzania, found that the propensity of post-primary school leavers to migrate was twice those having only a primary education and more than twenty times higher than those with no education (Sabot, 1979 : 106-107).

(vi) Occupational status

Since migrants, on the average, tend to have higher education than non-migrants it follows, according to Browning, that ... "migrants to large cities, have ... a higher occupational level than the populations from which they originate." (Browning, 1971 : 290). While this might hold true in most Developed Countries, it does not in all Developing Countries. In some countries there are two streams. Both can even have the same area of origin. Those in the stream having higher-than-average education originate

generally from higher paying, and usually higher status non-agricultural occupations. The other stream is made up of the uneducated, unskilled, poor or even destitute persons. Usually this group originate from 'low-status' agricultural or wage labour occupations (Perlman, 1976 : 62-66).

A close scrutiny of the migrant streams shows that a high proportion of migrants are new entrants to the labour force, and as such had no previous occupation. Due to the high emphasis on education (much of which, as Bairoch (1973) shows, is unsuited for rural needs), school leavers find a dearth of employment for which they have been trained²⁷. In preference to taking up rural occupations these choose to migrate. In the light of this, Sabot's findings, that the majority of those who leave the villages had little involvement in agriculture, seem to have some credibility.

(vii) Innovativeness and propensity to assume risks

"If socio-economic indicators alone explain migrant selectivity", as Kemper points out, then "all households with high levels of education, occupation and living standards would have sent migrants to ... the city" (Kemper, 1977 : 67). Since this is obviously not so then other factors determine who migrates and who remains at home. To define these 'other' factors is 'inherently' difficult. Simon Kuznets, according to Browning, considers one of these factors to be the "trait of willingness to assume risks" (Browning, 1971 : 292). But risk itself is a psychological variable that is inextricably intertwined with age, sex, marital status, education, etc.; willingness to assume such may depend on an infinitely great number of other factors and specific conditions. Need and/or aspirations may serve to stimulate this risk-taking propensity, or it may be that migrants, being aware of their social milieu, evaluate their probable 'situations' in alternate locations and move to that location where their expected benefits are highest.

In view of the foregoing a likely profile of migrants would then be: that they tend to be relatively young; females tend to predominate in the flows to cities in some regions (Latin America) while males dominate in others (Africa and Asia); most are likely to be single; generally they are more

educated than the origin population and as such have a higher propensity to migrate; and finally they tend to be more active, more ambitious and have a greater propensity to assume risks in their quest for what they regard as means of a 'better livelihood'.

6. The Theory of Migration Decision

On the whole, to explain why and how people migrate is 'notoriously' difficult. It is partly because of this, according to Everett Lee (1969 : 284) that researchers have been reluctant to generalise and set forth theoretical propositions. As a subject, ever since Ravenstein made his observations and stated his much quoted laws in 1885 and 1889, the interest in migration has grown tremendously. In particular, since the mid-sixties, it has become the focus of attention to which the burgeoning number of studies attest. Researchers from all related disciplines attempted to formulate explanatory theories and present models simplifying the process of rural-to-urban or other migration.

However, despite the number of theorists and model-makers only few notable contributions were made to the clarity of an overall understanding of the various migration processes. From a point of view of their own disciplines many concentrated on some lesser explored aspect of migration. Thus, instead of concentrating on migration per se, the majority of researchers were involved in 'infilling' in which many ad-hoc models of migration were substituted for theory. Because of this it is difficult to identify a theory that would apply generally and be valid in view of new findings. In the existing literature three broad, though not entirely separate, frameworks under which migration decision making can be analysed are available.

Following the work of Ravenstein (1885, 1889), Stouffer (1940, 1960), Zipf (1946), Bogue (1959, 1960), Wolpert (1965) and various others have made valuable contributions to migration understanding, the essence of which Lee

intelligently incorporated into a theory of migration. Lee defines migration as "a permanent or semi-permanent change of residence", and that "every act of migration involves an origin, a destination and an intervening set of obstacles" (Lee, 1969 : 285).

The factors which enter the decision-to-migrate and process of migration, according to Lee, are those that are associated with the area of origin, intervening obstacles and personal factors. Every area is assumed to have positive and negative forces. Positive forces tend to retain the individual while negative forces act as a 'push' to the individual. Depending on their personal traits (e.g. age, sex, education, skill, race, propensity to assume risks, etc.), migration occurs re-distributing people to places where their positive, 'attraction', forces are greatest, or where negative forces are least. In addition to personal factors there are 'general sets of factors' to which most people react in the same way, i.e. towards higher wages, better employment opportunities, better amenities, etc. There are also several differences between factors associated with the area of destination and area of origin. Generally, potential migrants have more information on their area of origin than on intended destinations²⁸. Factors at destination and origin areas tend to be viewed differently by persons in different 'stages of the life cycle', i.e. age groups²⁹.

While 'positive' and 'negative' factors of Lee go a long way in explaining migration the migration decision is not a simple calculus of the positive and negative factors. The balance, or the dominance of one set of factors in favour of, or against the move must be enough to overcome the "natural inertia" that always exist (Lee, 1969 : 287). Lee further introduces the variable of "intervening obstacles" which is said to occur between the origin and destination points. These vary with different individuals. 'Obstacles' that may be slight to some are insurmountable to others. In all cases distance acts as an 'impediment' to migration. With this understanding through the conceptualisation of the positive and negative factors as they occur to migrant perceptions, Lee formulated a number of general hypotheses about the volume of migration, the development of stream and counter stream and characteristics of the migrant. (For

a summary of Lee's hypotheses see footnote)³⁰

The second main branch of migration theory can be generally described as economic-oriented³¹. Taking this view several models purporting to explain rural-urban migration have been forwarded by Economists interested in the role of labour in economic development. Two such models are outlined below.

The first model is associated with Economists of the Harvard School. In particular it 'permeates' the work of Simon Kuznets (1957). This approach 'delineates' the relationship between internal migration and economic development in terms of the 'selectivity' of people. In short migration is effected by persons who have the ability to 'detach' themselves from their rural environment and to 'adapt' to the unfamiliar urban environment in response to better economic opportunities available there. This distribution then promotes economic growth which induces further migration of selected individuals³².

The second approach, developed originally by Professor W.A. Lewis and subsequently 'formalised' and 'extended' by Professors G. Ranis and J. Fei, is basically a model of Economic Development through the utilization of rural surplus labour - thus, in effect, it is also a model of labour migration. In the model, the economy consists of two sectors, the traditional rural sector where labour is assumed to be in surplus and have zero or very low marginal product, and the (modern) urban sector characterised by high productivity to which labour is transferred. The rapidity of this transference is determined by the rate of capital formation and subsequent increase in employment in the urban industrial sector through the "re-investment" of profits creating, at the same time, further growth. The level of rural and urban wages are assumed to be constant with urban wages kept sufficiently high to induce migration. (According to Lewis average urban wages should be at least 30% higher in order to induce the rural worker to migrate. Lewis, 1954 : 150). In such a situation the supply of labour is likely to be perfectly elastic. The process of rural to urban transfer is assumed to continue until all rural 'surplus' labour is absorbed

into the urban industrial sector. At this point the supply curve becomes positively sloped (since there is little or no real income differential between the two sectors). Thus economic development takes place by inducing labour to shift from areas where its unit productivity is low to where it is high.

The third major theory of migration was developed by Economists of the Chicago School and is based on the neo-classical theory of investment. Migration is regarded as an efficient allocation of resources. As such, it can be put in a costs and returns framework to shed light on a number of its processes and functions in a dynamic economy and at the same time clarify some of the misconceptions that surround it. The returns or rather expected returns, according to Sjaastad (1962) - the principal proponent of this view, consists of the differentials in income-streams accruing to the migrant from the (expected) 'better' employment and other opportunities available at the destination. Costs, comprise of direct and indirect costs. The former includes direct money costs of transportation, and initial settling, while the latter includes the opportunity costs of moving, job search, further training etc. and the 'psychic' costs of moving. If returns (money and non-money) seem greater than costs at a location then the resource, labour, is expected to move to that location.

A fourth theory developed by Todaro, that is essentially the same as Sjaastad's but applied to a specific context, is considered here.

Starting from the basic assumption that 'migration is primarily an economic phenomenon' and that the individual is a 'rational decision maker', migration, according to Todaro (1969), occurs from rural to urban areas in response to rural-urban differences in 'expected rather than actual earnings' even if high rates of unemployment prevail in urban areas. Todaro's basic premise is that migrants (as rational decision makers) consider the various labour market opportunities available to them in the urban and rural sectors and choose one which 'maximises' their 'expected gains' from migration. Expected gains are measured by the difference in real incomes between rural and urban work and the probability of a new migrant obtaining an urban job. Basically, the theory assumes that both actual and potential members

of the labour force compare their expected incomes (i.e. difference between returns and costs of migration) for a given time period in the urban area with the prevailing average rural incomes. Migration then occurs if the expected urban income exceeds that of the rural (Todaro, 1976 : 28-29; 1977: 220-221).

In their application to the real world situation, without exception, all of the models tend to be lacking in some way or another with some more than others. The 'push-pull' models were found to apply in a general sense only³³. The hypotheses forwarded helped little in clarifying many of the vital issues in migration, i.e. the decision making process, the function of migration and its consequences, etc. The economic labour transfer model too, because of its improbable assumptions and its static analysis, was deficient in explaining migration in the dynamic real world and in particular in the poor economies of the world. This is so because different economic forces apply there. The urban industrial sector is unable to expand and absorb migrant flows and this, in turn, is due to conditions that are different from those which occur in the present Developed Countries³⁴. The cost and returns framework of Sjaastad and expected income approach of Todaro however, seem to have a more overall relevance due to the fact that they are not static and the 'maximisation of utility' (an obvious human trait) is their basic assumption. The following section proposes to examine the applicability of the above models more critically in the hope of an explanation of migration, particularly as it applies to the poor countries of the developing world.

7. The Applicability of Models in Developing Countries

A. The Gravity Model:

The 'sociological oriented' push-pull theory of Everett Lee seems appealing because of its simplicity and because of the 'intuitive validity' of some of its hypothesis. However, since the basic model utilised is a gravity model, the degree of generality diminishes its usefulness. Some of its criticisms are that it does not clearly specify which of the plus and minus factors at origin and destination are important to which groups or classes of

people. In the theory, Lee gave the perception and decision-making of the individual "a position of pre-eminence", but in the formation of his hypothesis individual perceptions were of "no relevance" (Kammeyer and McClendon, 1975 : 218), and were lost in the median response³⁵. Some serious criticisms arise from the observations of Todaro, who states that "the theory has no insights into the possible trade-offs between the plus and minus factors nor the range of possible migration responses to the alternatives in the magnitude and/or the sign of plus and minus factors" (Todaro, 1976 : 19). Also, by not specifying the inter-relationships between dependent and independent variables within the context of a rigorous theoretical framework, he (Todaro) contends that Lee's theory is of little relevance in policy making, especially in the Developing Countries.

B. Economic Oriented Models:

In their application to the real-world situation of migration the economic models are less criticised than the generalised 'push-pull' models for several reasons. With the use of economic tools of measurement a greater number of variables could be introduced into the various migration processes. The analysis of migration data benefits from intelligent regression and multiple regression analysis, simultaneous equation formulations, micro modelling, etc. which helps to elucidate specific relationships within the general migration framework. Also, most of the hypotheses were testable which was extremely useful in showing the gap between theory, as pictured by the model, and reality³⁶. But nevertheless, some models are soundly 'criticised' for some of their highly improbable assumptions and/or their failure to account for certain basic human and non-human traits that characterise rural-urban migration.

(i) The descriptive model -

Examining the descriptive model of migration based on the selectivity hypothesis of Kuznets (1957) a number of discrepancies are noticeable. First, the model is too generalised. Although the assumption of utility

maximisation is implied it does not specify the relationship between costs and return nor does it shed any light on the vital processes of decision making. Secondly, the model does not account for the migration of the relatively uneducated, unskilled and the rural poor who comprise a major portion of rural to urban migration in Developing Countries.

(ii) The Lewis-Fei-Ranis model -

The Lewis-Fei-Ranis model can be criticised in the context of its inapplicability to the countries of the Third World. First, the model implicitly assumes that the rate of labour transfer would be 'proportional' to the rate of urban capital accumulation (i.e. the amount of profits or the rate at which it is re-invested and which in turn induces further migration). Thus the faster the rate of capital accumulation the greater the growth of the modern sector and job creation and thus the greater the rate of rural-urban migration. But what the model did not take into consideration was the fact that the introduction and substitution of labour saving technology, as has occurred in most Developing Countries, had reduced the demand for labour. Without increases in the labour force technological inputs resulted in higher unit productivity and an increase in the total product signifying increased profits which was, obviously, the motive of introducing technology. Hence, the urban industrial sector operates along the lines of profit maximisation which was not accounted for in the model³⁷.

The second criticism was that 'surplus' labour exists in rural areas and full employment in the urban. Nearly all of the 'contemporary' field surveys show the opposite to be true. In some countries there is even a shortage of rural labour seasonally. Also, the notion of rural 'surplus' labour having a very low or zero marginal product may not be strictly true. Another major criticism is the "notion of the continued existence of constant real urban wages until the supply of rural surplus labour is exhausted" (Todaro, 1976 : 25; 1977 : 217). In most Developing Countries urban wages have a tendency to rise. Also, the increases in average incomes tend to be higher in urban than in rural areas. Thus taken together, the

introduction of labour saving technology, the non-existence of rural surplus labour and the tendency of urban wages to rise, relative to rural, in a situation of high and increasing urban unemployment makes the Lewis-Fei-Ranis model of migration of little relevance in policy making towards solving urban and rural unemployment in Developing Countries³⁸.

(iii) The Human Capital Approach Model:

Having individual maximisation as the basic assumption, the Human Capital Approach model of Sjaastad is a more useful model of migration. In this the decision to migrate is put in a framework of costs and benefits. If benefits (or returns) are sufficiently high to offset costs then migration is likely to occur. Analysis of the decision in this framework explains a number of observed phenomena. It explains why migration rates may be low despite the existence of high urban-rural income differentials (obviously, because costs are greater). It explains why younger persons tend to predominate in the migrant streams and older persons less disposed to move. This is so because older persons have a shorter pay-off period. The migration costs of younger persons (spread over a number of years) are likely to be smaller. Most young migrants eventually settle in the urban environment and benefit from the incomes of children etc.³⁹ Thus overall, their long term economic and social returns that accrue from their migration, in the first instance, are likely to be greater than anticipated at the time of migrating.

This model stresses complementary investments in the individual's human capital (mainly be education) which provides a satisfactory explanation of the higher propensity of the educated to migrate. (It is interesting to extend this model to a household decision rather than an individual one in which the migrant is sponsored by the family in the expectation of repatriated profits as is the common case in many Developing Countries.)⁴⁰ One of the more significant advantages of this model is that it allows for the crucial element of time to be included in the analysis; hence, unlike most testable economic models, this approach allows for a

dynamic instead of a static analysis.

However, the model does not escape criticisms. Gains and costs are viewed mainly in a real resource sense (i.e. quantitatively) as the determinant of the migration decision to the relative exclusion of (non-quantitative) variables such as psychic costs, psychic earnings, etc. But according to Sjaastad ... "the need for these measures can often be circumvented" (Sjaastad, 1962 : 93)⁴¹.

(iv) The Expectation of Income Model:

The fourth theory, i.e. that of Todaro, is considered the most appropriate of those discussed, in explaining the factors that determine migration in the case of the Developing Countries - and indeed in all countries (Greenwood, 1975 : 403). The basic model, operating under the same assumptions as that of Sjaastad, incorporates a critical 'expected income' variable to predict migration. Thus the model departs from the contemporary view that migration can be predicted only on wage and income levels in rural and urban areas. The main element of the model is that the migrant's final decision to move will not be motivated by the prospect of increased earnings alone but by the crucial probability of his being employed within a reasonable time upon migrating. Thus, while actual rural-urban income differentials may be positive (and high enough to offset costs) the expected income differentials may be negative because of low employment probability and so make migration, rationally, not feasible.

However, if the migrant expects a low probability of his finding employment in the initial period of his migration but is confident of obtaining such in time (as he probably will since he will be longer in the urban area and so 'broaden' his urban contacts), then his decision to migrate, if he does, is still rational, and would continue to be so as long as "the present value of the net stream of expected urban incomes over the migrant's planning horizon exceeds that of the expected rural income" (Todaro, 1976 : 31; 1977 : 221).

This, to a fair degree of accuracy, explains why rural-urban migration continues in Developing Countries where urban unemployment is observed to be high and rising (which under normal circumstances should deter migration). In this situation the newly arrived migrant can expect to be unemployed for a reasonably long time but, because urban income is usually much higher than rural, when he is finally employed his returns compensate for his period of waiting, job training, etc.⁴² Thus, it is perfectly rational for migration to continue even in face of high unemployment. The occurrence of such situations is, rightly, according to Todaro, an indication of the serious imbalance in economic opportunities between urban and rural areas (Todaro, 1977 : 222).

As mentioned, Todaro's model seems to be the most reasonable representation of migration as it occurs in Developing and other countries. However, it does suffer from some weaknesses in that it does not take into account some of the imperfections of the migration variables in the decision to move process. First, a great many migrants do not, or are not able to consider all the labour market opportunities available to them since they are 'sponsored' by the family at home⁴³. Thus the decision to migrate is determined by the family acting in both its own, and in the migrant's interest. Secondly, the sponsored migrant is likely to have greater 'back up resources' i.e. financial support from home if it is needed. This insurance surely has an effect on inducing persons to migrate who would not have done so on their own⁴⁴. Thirdly, migrants have been known to have a high rate of occupational mobility. Todaro was not explicit about whether his probability variable could be adjusted to account for the gradual rise of migrants' expected incomes⁴⁵. Also, it is not known whether dependents' incomes affect that of the migrant. Fourthly, Todaro's migration function excludes to a great extent important complementary factors such as superior urban living and/or facilities as well as a range of psychic costs and returns, and the role of friends and relatives in the destination area.

C. Some Policy Implications of the Todaro Model

The Todaro model differs from most models in that it does not suffer from the common 'failings' of being of little relevance to policy making and planning in general. It has a number of important policy implications with regard to wages, incomes, rural development and industrialisation in Developing Countries. Firstly, since migration is shown to occur in response to expected income it is essential that urban and rural imbalances in economic opportunity be minimised. Secondly, there should be some restraint on the rate of increase in urban wages in relation to rural incomes, since, as the theory (substantiated by empirical findings in Africa) shows, the larger the gap between urban and rural real wages the higher the rate of urbanisation and unemployment are likely to be. Thirdly, the increase in urban job creation without 'simultaneous' attempts at improving rural incomes can lead to the 'paradoxical' situation where an increase in urban employment leads to a higher level of urban and rural unemployment (Todaro, 1977 : 222). According to Todaro, for every new urban job created two or three migrants who were productively occupied in rural areas may come to the city. Thus a policy of reducing urban employment by providing more jobs may, therefore, lead to lower rural production and level of unemployment.

Fourthly, because there is an oversupply of urban labour, employers tend to use education as a 'rationing device' in employment selection. The implication of this is an increase in the private demand for education which exerts strong pressure for Government investments in post-primary education. Since the observed relationship between migration and education attained is strong Government over-investment in post-primary facilities turns out to be, according to Todaro, "an investment in idle human resources", and ... "is not only bad economics: in the long run it is likely to be bad politics", as recent events in the developing world indicate (Todaro, 1977 : 223). Fifthly, Todaro shows that wage subsidies and other factors including minimum wage legislation results in a higher than the 'correct' or 'minimum' wages which may 'effectively' generate employment opportunities, but can also lead to higher levels of unemployment by inducing

further migration. Finally, rural and agricultural development is essential if the urban employment problem is to be solved. There should be a restoration of a 'proper balance' between rural and urban incomes. 'Creative and well-designed programmes of integrated rural development' should be implemented according to the needs of the particular countries and regions, since it is this that is ... "the only viable long run solution to the problem of excessive rural-urban migration" (Todaro, 1977 : 224).

To summarise, migration is not a simple response to spatial earnings differentials but a search for higher paying occupations (Sjaastad, 1962 : 83; Carvajal and Geithman, 1974 : 110). The decision to migrate is presumed not to be based alone on the selectivity of migrants but on their expectations of higher income and the probability of obtaining employment at the place of destination within a reasonable time. Depending on its rate and pattern migration, as will be seen in the following section, has a number of consequences both on sending and receiving areas and to migrants themselves.

8. The Implications of Internal Migration

This section presents some of the general implications of migration. It outlines three of the more commonly held views and discusses their relevance in explaining the effects of migration in Developing Countries. It also presents some of the general effects to individuals and to receiving and sending areas.

A. Some Theoretical Views:

(i) The Neo-Classical View

According to the neo-classical theories of general equilibrium and competitive market the discrepancy in factor payments caused by changes in the demand and supply schedule will result in the re-allocation of factors of production until an equilibrium situation is reached. In the specified field of regional economy the theories assert that the inter-regional mobility factor is a force tending to level prices for homogeneous factors in different regions. Thus in a situation where there is inter-regional (or urban-rural as the case might be)

differentials, say in real wages, labour will migrate from low wage region to high wage region until a levelling in wages occurs. This conclusion is based on several 'critical' assumptions, i.e. labour is regarded as homogeneous, a situation of constant returns to scale exists and labour markets are perfectly competitive. Also the sole cause of labour mobility is assumed to be wage differential, and finally, the analysis is static.

However, in the dynamic real world situation, and in particular in the Developing Countries, it has been observed that wages between regions are not levelled or approach such a trend with the movement of labour. The main reason why this is not so is that the assumptions are inapplicable and the 'primary' reason for this inapplicability is that labour is not homogeneous between regions as it is assumed to be (see Greenwood 1975 : 415). Migration is rather selective of the young, the educated, and the skilled. Thus, while it depletes the rural labour force qualitatively it has the opposite effect on receiving areas. Instead of constant returns to scale, industries located in in-migrant areas generally have a higher rate of productivity and benefit from external economies, and are so able to pay higher wages than rural. As such, perfect competition does not exist in labour markets between regions. Also, wage differentiation is often not the sole cause of labour migration. The previous sections on causes of migration and theory of migration decision show that a mix of factors usually influences the final decision to move.

In addition to the invalidity of the basic assumptions a number of 'imperfections' occur in the regional economies to weaken the theory of the equilibrating effects of migration. First of all, productivity in the agricultural sector tends to be relatively low except in the commercial type farms which, as a rule, produce for export and employ only a small proportion of the agricultural workforce (Elizaga, 1975 : 98). Secondly, the terms of internal trade between agricultural and non-agricultural products tend to favour in-migrant areas where manufacturing and processing activities tend to be located⁴⁶. Thirdly, wages in in-migrant (urban) regions tend to be significantly higher than in sending regions (Bairoch, 1973 : 30-31). Often this is due to direct government intervention by way of minimum wage legislations

(Sabot, 1979 : 115)⁴⁷. Trade unions, which tend to be stronger in urban regions, prevent a 'downward inflexion' of wages even when in-migration increases the supply of labour. Also they exert a continuous pressure for the upward movement of wages. Fourthly, the form and content of rural education tend to create a disdain for manual work connected with agriculture and to induce school leavers to migrate irrespective of employment opportunities present at home (see Myrdal, 1968; also Blaug, 1975)⁴⁸. Fifthly, the range and quality of urban services and general standards of living are perceived to be superior to rural. Under these conditions in-migrant areas become increasingly attractive while sending or rural areas become more and more disadvantaged. The differentials in wages etc that exist grow wider instead of approaching an equalisation. Thus, in conclusion, the neo-classical notion of internal migration being an equilibrating mechanism does not seem to apply in the context of Developing Countries.

(ii) The Convergence of Per-Capita Income View

According to the 'free market' economic system, if there is a situation of marked imbalance in resources and in economic activity between regions a convergence of per-capita income or a redistribution will occur favouring the low income regions.

Using a simple static model with certain simplifying assumptions Richardson (1969) has shown that the inter-regional flow of factors may lead to the convergence of per capita income. According to this model, by raising the capital-labour-ratio, i.e. increasing the flow of capital to capital-scarce or labour-surplus regions, the marginal product of capital will fall and that of labour will rise. (Thus the theory posits an inverse relationship between wages and the marginal product of capital.) Capital will flow to low wage regions where its demand should be higher and likewise a reverse movement would occur in labour. In time, the least developed regions that would be developing at a greater pace should catch up with those that are more developed. Thus an equalisation of income in real terms between regions would have occurred.

Essentially this is a general equilibrium theory in which the adjustment of demand and supply schedules along with certain simplifying assumptions (mentioned earlier) brings about equilibrium conditions.

This explanation too is inadequate in Developing Countries. Reality shows that a cumulative process occurs broadening the gap between per capita income between the more developed and less developed regions instead of a convergence occurring to close the gap. The main reason for this, according to Elizaga, is that under laissez faire economics the marginal efficiency of investments depends on technological change, variations in inter-regional demand, and other factors such as infrastructure, skilled supplies of labour etc which are generally deficient or absent in poor regions (1975 : 405). In contrast, these conditions and factors are in the more developed or urban regions where they tend "... to perpetuate themselves and become more marked with agglomeration advantages ..." (Elizaga, 1975 : 405). The benefits foregone by capital not relocating to use cheap rural labour are compensated by a more conducive urban investment climate that gradually develops. The urban market is larger, new technology and supplies of skilled labour are available, also external economies are present to optimise investments. Hence, there is no capital flow to poorer regions except migrants' remittances to balance the inflow of labour. Thus instead of a convergence of per capita income occurring, as the theory suggests, a cumulative process occurs which increases inter-regional differentials in wages and income.

However some researchers, for example Easterlin, according to Li, hold the view that a convergence of per capita income does occur through migration (1976 : 83). If it is observed to cause some disparity in the society, as is typical in the early stages of development, it would diminish as society advances - regional convergence comes at a later stage (Williamson, 1965). This would seem logical since mature economies are supposed to grow at relatively moderate rates due to the fact that, in time, out-migration exhausts the supply of labour which then becomes inelastic. If this is due primarily to low demographic growth then it signifies that the regions have achieved balanced regional development. However, it should be pointed out that the

above view of regional convergence is likely to be more relevant in the developed regions of the world⁴⁹. In most of South East Asia, Africa and Latin America high rural fertility seems to provide an inexhaustible stream of migrants. In addition rural decline increases as the rate of migration increases.

(iii) Cumulative Causation View

Observing the trends of migration and its consequences some, for example Myrdal (1968), have pointed out that under ordinary conditions market forces tend to increase rather than diminish inter-regional inequalities and, more important, it does this in a circular and cumulative way. In the unrestricted economy market forces tend to concentrate the more productive activities in certain localities and tend to increase this concentration at the expense of others. This is so for two reasons. One is that favoured localities generally have natural or historical significance and enjoy a number of benefits. The other, and more important, is that capital tends to have higher returns when invested in localities of expanding internal and external economies which, as a rule, occur in the 'favoured' localities. In this situation "migration and capital and trade movements are the means whereby an upward cumulative process takes place in rich regions and in a downward form in poor regions" (Elizaga, 1975 : 406). This takes place in the following manner. Expanding centers benefit from inputs of technology, capital and labour which serve to encourage investment. This in turn further increases income and demand which give rise to a second stage of investment. Thus the process occurs cumulatively.

The above view of migration seems to be appropriate in most of the Developing Countries and may even have relevance in the more Developed World. Seen as a direct effect the cumulative process accentuates regional differentials. Rural industries, unable to face urban competition, decline while migration aids the growth of urban by creaming-off rural labour, capital and other resources and by increasing demand. Thus in a regional sense, urbanisation and metropolisation is accompanied by rural stagnation

and decline. But from a national point of view the centralisation of productive resources that migration brings about may be highly beneficial, especially in poor Developing Countries such as Guyana and in many other Latin American, African and Asian countries. In these countries the few productive resources that are available are dispersed. In this situation the total national output is likely to be lower than if some degree of migration and centralisation of productive resources were to occur. Theoretically, if there is an efficient system of redistribution of the benefits of centralisation then a lowering of regional differentials can occur, in which case migration is beneficial to both receiving and sending areas. However, the system of redistribution in Developing Countries is, in most cases, ineffective, which results in the mal-distribution of benefits accruing from migration. Thus in conclusion, although migration may be beneficial to the national economy by way of increasing national product it does so at the cost of increasing the differentials between regions. Depending on the nature of the economy, the long term effects of this might offset many of the benefits due to migration.

The following is a brief mention of some of the private returns to migration and some of the general effects on sending and receiving areas.

B. Private Returns of Migration

Whether migrants are compared to non-migrants at home or to natives at destination they generally tend to improve themselves economically (Morrisson, 1977)⁵⁰. Despite high and rising unemployment in urban places (and some marginalisation or bias that they face) most migrants find some employment within a reasonable time (Perlman, 1976; Yap, 1975)⁵¹. Since income levels depend largely on level of education attained as reported by Sabot (1979), Gugler (1976), and Caravajal and Geithman (1974) migrants with high levels of education have the highest income among migrant groups.

But due to the diversity of employment opportunities and scope that exist in urban areas even those with lower levels of education and skills manage to increase their income in time. One way in which migrants increase their income is by increasing their human capital stock by means of acquisition of higher education and skills. Harris and Todaro (1970) note a queueing process by those unemployed and in the informal market to enter the higher paying and more prestigious formal sector, which attests to the constant striving by migrants to improve themselves economically and socially. Many migrants are able to spread their income gains to their sending households by way of remittances (Sabot, 1979; Connell et al, 1976). In many cases migrants benefit from their dependents' incomes (Kemper, 1977). Finally, migrants enjoy many non-job benefits of the increased real incomes they attain by migrating (Rothenberg, 1977). Also they benefit from better urban utilities. Urban housing, health care, education and recreation facilities are often far superior to rural⁵².

C. General Effects of Migration on Sending and Receiving Areas

The effects of migration depend on the rate and character of the migrants and that of the sending and receiving areas. Due to the range of effects (occurring as a benefit or cost) only those that apply generally are presented here.

First, is that migration has a number of demographic effects on both the sending and the receiving areas. Because it is selective of the younger age groups of between 15 and 40 years rural-sending areas are being left with an increasing proportion of the young and aged in their populations. This increases the dependency burden on those in the economic labour force and on rural welfare services wherever such happen to be present, while it has the opposite effect on in-migrant (urban) areas. Migration influences the rate of population growth. In sending areas it tends to depress the rate of growth. It does this in three ways: it delays the age of marriage; where it results in the unbalancing of male-female ratios a lowering of the birth rate occurs (Davis, 1977 : 160; Connell et al, 1976 : 140); and it transfers

population from rural areas of high fertility to urban where it is lower (Standing, 1976). On the other hand, in in-migrant areas a high rate of in-migration tends to inflate the rate of population increase.

Secondly, because migration is selective it deprives rural areas of the cream of their population resource. The loss of the educated represents a direct loss of investments made on education. It is also an indirect loss since sending areas cannot tax the high incomes of this group in order to recoup some of its investment costs. However, the loss of the educated may be an indirect benefit to those remaining. According to Greenwood, this loss has a "positive pecuniary spillover effect" to those remaining due to the fact that the labour supply is lower than it would otherwise be. All remaining persons with less education should find an "upward pressure" exerted on their wages while those with more education do not have a "downward pressure" exerted on theirs (1975 : 415). But it should be noted that the presumption of this gain predicates the fact that those out-migrating were fully employed, and that their out-migration would reduce the pressure on employment. In most of the Developing Countries there is a substantial degree of unemployment among the educated at their place of origin. Also, their out-migration creates little perceivable impact on the wages of those remaining due to the high fertility existing there. While the out-migration of the skilled and educated is a loss to rural areas it is an obvious gain to urban, as will be seen later.

Thirdly, migration may affect employment levels in sending and receiving areas. Due to the selective out-migration of the young, the skilled and the educated rural areas become less attractive to new industries that require a large supply of skilled workers. Only marginal firms paying low wages are likely to be located there (Morrisson, 1977 : 70). On the other hand, the flow of these persons to urban areas is most likely to stimulate industrial expansion and to create additional employment opportunities: "...Migration and employment growth have been known to perpetuate each other" (Morrisson, 1977 : 69). But it may not be so in all cases. Where the rate of in-migration is excessive and beyond the absorptive capacity of urban industry and other employment avenues it may cause a disequilibrium in the urban labour market

resulting in a rise in unemployment or "over unemployment". The consequences of this are that wages may decline, relatively, in the unregulated sector⁵³ and the period of job search and costs involved are likely to be higher for both migrants and non-migrants.

Fourthly, out-migration may have serious implications on the level of productivity and on total rural production. It may either cause a rise or a lowering of productivity but, in both cases, total production is likely to decline relative to population growth. This is likely to happen in either of two ways. Where migration reduces the pressure on land a lessening of fragmentation and even some consolidation of uneconomic parcels may occur. This in turn is conducive to mechanisation which, while it may increase the productivity of the fewer workers on the land, decreases production per acre (Sukdeo, 1977: see also Raj, 1973 and Dumont, 1963). The other way in which migration may affect productivity, and hence total production, is that if the rate of out-migration of farmers and farm-workers is high the resultant labour shortage causes a shift from the usual intensive cropping pattern to extensive cropping. Other changes that the loss of labour may cause include a change of the crop type or even a fall in the acreage cultivated as reported by Connell et al (1976 : 143). Thus, in this case too, migration causes a lowering of productivity per acre and total production. Since most of the Developing Countries depend on the land for supplies of food and raw materials for industry then, by lowering production, migration may have serious consequences on the level of nutrition and industrial growth in these countries. To economies that depend largely on the export of agricultural raw materials its consequences may be even more critical⁵⁴.

Fifthly, despite their marginalisation rural areas do receive some benefits from the out-migration of some of their population. The most evident is the receipt of cash remittances. The extent of this income and the regularity of its flow to the recipient communities depends on three factors: the nature of the migration decision, the purpose of migration, and whether the migrant returns or not. In many cases the impact of remittances on communities of origin is not very noticeable as most of it tends to be consumed in "everyday

household needs or in conspicuous expenditure" (Connell et al, 1976 : 98; Caldwell, 1969 : 163). In some others it may be used in major expenditure such as the purchase of land or building of a house or to educate children, or even as wages to village labourers to compensate for the loss of the migrants' labour.

Apart from direct economic benefits, migration affects the rate of social change and the social organisation of a society. By migrating the cultural values, norms and goals of migrants change, affecting themselves as well as their places of origin and destination (Kosinski and Prothero, 1976 : 11-12). Places of destination have the benefit of extracting 'desirable influences' from the diversity of cultures that migrants bring. A rapid inflow of migrants to the urban labour market may allow some occupational mobility of the origin population. To the sending communities migration may have an even more significant effect. Former migrants are usually the main source of information feedback (Mabagunje, 1968). Such information that they might send may trigger off a chain of reactions in the sending communities. Often, return migrants act as agents of modernisation and diffusion among the sedented, and so accelerate the pace of social change⁵⁵. Also, they fulfil roles as innovators and as agents of economic change. Connell et al reviews a number of studies in which return migrants were instrumental in causing a major economic change such as a shift from subsistence to cash cropping (1976 : 132-133). Another effect of migration on sending areas is that any remittances sent by migrants are likely to contribute to the 'increased monetisation' and to draw those communities into the urban monetary nexus (Standing, 1976 : 4). However, not all migrant influences are desirable. Frequently the diversity of cultures that migrants bring may be a cause of conflict (see Midgett, 1975; also Sutton and Makiesky, 1975). By accelerating the pace of change migration may have a destabilising effect on the social organisation and control in rural communities.

CHAPTER II

AN INTRODUCTION TO GUYANA

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1. Introduction

This chapter is intended to provide an introduction to Guyana and the present social, political and economic setting in which rural out-migration occurs. It begins by presenting relevant geographical and historical information on the country - and to show how some of the early Colonial and Plantation policies have led to ruralising the population in the first instance, and to later cause a rural-to-urban drift. It presents a brief analysis of population growth in the country and the characteristics of the population which, to a great extent, determines migration. The chapter concludes by outlining the major post-war political, administrative and planning developments and their implications to migration in Guyana.

2. Geography and Natural Resources

Guyana is the only English speaking country in the South American continent. It lies just north of the equator - between 1 and 9° latitude and between 57 and 61° west longitude. In area extent it is 83,000 square miles.

Geologically, the country is part of the old precambrian Guiana shield, the denudation of which influenced its topography. In terms of areal differentiation the country divides roughly into four natural regions. (See Maps I and II in Appendix). The climate is tropical equatorial with the sea coast being tempered by the cooling North-East trade winds that blow across the coastlands from the Atlantic. Relative humidity tends to correlate with the wet and dry seasons, but generally it is high throughout the country. There is a small diurnal and seasonal variation in temperature. Mean temperature on the coast is in the vicinity of 80-85°F. Much of the rainfall occurs in two seasons - a long wet season lasting from May to mid-August in which an approximate of 45% of rain falls, and a short wet season

lasting from December to mid-February in which one quarter of annual rainfall occurs. Average rainfall on the coast where 90% of the population is located is about 60-80" annually compared to 120-140" in the interior highlands. (See Map III in the Appendix). Despite, at times, heavy cloud cover, there is an average of 6-8 hours of (bright) sunshine daily.

Once linked with gold and the riches of the fabled El Dorado, Guyana has, apart from abundant sunshine, rainfall, and lush vegetation, a number of mineral and non-mineral resources of which only a small portion has been exploited to date¹.

The coastal soils comprise fluvio-marine and alluvial deposits and are generally good to moderate for agriculture. However, because of their clayey and silty nature the soils have poor natural drainage and require high investments in drainage systems before agriculture could be profitably undertaken. The interior soils tend to be poor-to-moderate for agriculture². In some areas, i.e. in the North West Region, soils tend to be peaty and swampy requiring large inputs of fertilizer to make agriculture feasible. In other Interior Areas pockets of deep, well drained, sandy soils can be found which with fertilizer and conservation practices can easily be adapted for agricultural use, but basic infrastructure, i.e. roads etc., to the interior are lacking. In terms of the extent of this resource only a small percentage is productively utilised.

Forests cover nearly 87% of the country (47 million acres) but the contribution of forestry to the economy is minimal. On average it contributes about 1% of the country's GDP and between 1 to 2% of total export by value³. The main reasons for its relatively insignificant role are that the stands of forests are usually of mixed hardwoods of which only a few species are commercially marketable. World demand is for softwoods. Thus the forests of Guyana are subjected to selective felling of only the high demand species, which keeps the costs of extraction high and is at the same time a wasteful use of a valuable resource.

Guyana has no known source of natural fuel or commercially exploitable high-demand mineral ores except for bauxite and some other lower-demand

mineral ores, i.e. kaolin etc. Bauxite ores of a fairly high grade occur within reasonable proximity to the coast but deposits are usually overlain by thick forests and deposits of sand and clay, the removal of which is expensive and prevents rapid exploitation of the resource. Gold, diamonds and other precious and semi-precious metals and minerals are mined in small quantities. Of the lesser important, in terms of unit value, ores - laterites, stone, clays and sand are extracted mainly for local use.

Indigenously, Guyana is known as the 'Land of many waters'. In many cases 'the many waters' - rivers, have been regarded both as a hindrance and an aid to development. Three huge river systems divide the country into three physically separate zones or counties, which results in a certain degree of isolation and higher transport and other costs between them. On the other hand the rivers have facilitated easy access to the interior regions in the absence of roads, and most of all, the rapid stream flow and the geomorphology of the land result in numerous rapids and waterfalls which have been recognised as potential sources of hydro-power generation.

3. Early Settlement and Labour Force Orientation

Little is known of the pre-history of Guyana apart from the fact that around 900 AD it was settled by groups of Cariban and Arawakan tribes who lived by hunting, fishing and by a culture of shifting agriculture. To the Europeans the country did not arouse interest until the end of the sixteenth century although the coast was known some one hundred years before.

The Dutch, under a Charter to the West India Company of the Netherlands, were the first 'effective' European occupiers. They settled in riverain areas of Essequibo and Berbice rivers, cultivated plantation crops and set up fortifications for defence purposes. By the beginning of the eighteenth century settlements began to spread down-river and on the sea-coast. This was so for three main reasons. First, the interior soils were of limited fertility. Second, was that there was a period of stability in European

relations which meant settlements were not threatened with bombardment and thus no need for locating in inaccessible (to the enemy) interior areas. Thirdly, more land was needed for the cultivation of sugar which had replaced coffee and cotton as high demand crops in Europe. Not only riverain settlements moved to the coast. Settlers in the smaller Caribbean Islands beginning to experience a shortage of land were lured to Guyana's coastlands by its alleged fertility, its cheap transport system⁴, and the non-occurrence of hurricanes. The British were most responsive and soon they outnumbered the original (Dutch) settlers.

The period 1781-1803 was a turbulent one in Guyana's history. The country changed hands of ownership no less than six times before it finally remained in British ownership from 1803 until 1966 when it gained independent status from Britain.

The British reconquest of Guyana in 1796 set off, according to Adamson, "the most feverish decade of speculation and expansion in the country's history ... A flood of newcomers looking for instant wealth poured into the country". (Adamson, 1972 : 24). Most were planters from the West Indian Islands who brought their slaves with them. For a short period Guyana was the greatest cotton producer in the world and the greatest coffee grower in the British Empire (Adamson, 1972 : 25), but competition and various trade policies ended the boom⁵.

The high profits obtained by the Colonists producing sugar, cotton and coffee were due to free slave labour which was the base of the 18th century Colonial agriculture. Plantation work was generally labour intensive, thus when the emancipation of slavery in 1933 occurred it spelt doom for many Planters. In many cases the number of slaves on a plantation was a reflection of its wealth. After 1938 many ex-slaves elected to leave the scene of their recent servitude and to establish plantations and farms of their own, or to move to urban areas where they could expect employment on the ports. This meant that many Sugar Planters went bankrupt. They could not readily accept a change in their circumstances. Freedom of the slaves meant an end to high profits and a sharp decline in their social

position in the colony. Because of this it would have been prudent, on their part, if they had, with tact and diplomacy, wooed ex-slaves to remain on the plantations as wage-labourers. But this was not so. The apprenticeship period was said to be the hardest in Guyana, taking the Caribbean as a whole, as Planters tried to extract as much labour from the negroes as they possibly could (Burns, 1937 : 363).

The harsh treatment in their last years of slavery and a number of activities and restrictions imposed on the newly freed slaves accelerated their exodus from the plantations. They could not retain their estate lodgings if they were not prepared to engage in wage labour - at wages set by Planters. Some Planters deliberately destroyed negro provision 'grounds' and fruit trees so as to make them dependent on estate wages to purchase food. (See Adamson, 1972 : 35). Since negroes could not erect their private dwellings or use estate lands to grow food they had to migrate. By 1948, only ten years after emancipation, only 20,000 negroes or one quarter of the original slave population remained on the plantations.

In leaving the estates the negroes had to contend with forces that tended to undermine and to some degree negate their full freedom. Although unutilised crown land was abundant in the colony the Planters'-controlled Legislature and the Colonial Office intervened to control the sale of land and prevent the rise of an independent peasantry as a strategy of controlling the labour market to their benefit. Crown lands were sold only in blocs at exorbitant prices. However, by pooling their resources groups of negroes were able to buy abandoned plantations and set up communal villages. (See Adamson, 1972 : 35-36). Others managed to buy small plots and set up peasant proprietary villages along the coast. Those who remained on the estates or settled in the environs worked on the sugar estates. These had no bargaining power. Wages were always set by the Planter-employers and as such were very low. In addition Planters manipulated price increases for essential food and consumer items which had to be imported since they actively hindered the development of indigenous substitutes. Thus workers were made dependent on wages for sustenance⁶, and the plantation, by employing subtle means, secured a supply of cheap labour.

The above situation could not continue indefinitely. Increasingly, the negroes drifted away from the plantations. To fill the labour shortage created by their withdrawal the Sugar Planters resorted to immigrant labour. The first flows were from the West Indies, Africa and Madeira but these were small compared to the later flow from India (see Table 2 in text). Indian 'Coolie' labour proved suitable for the plantation needs. However, their arrival in large numbers aroused feelings of hostility among the negroes. They changed a situation of labour shortage into one of labour surplus. Wages declined and more negroes out-migrated⁷. East Indians, because they were contracted, had to remain on the plantation site.

The Indian Coolie too found life on the plantations intolerable. Conditions were very different from that portrayed by recruiting agents in Calcutta and Madras. Most being illiterate felt cheated by the clauses and the interpretation of their contracts. Many came from urban backgrounds and were unused to arduous field labour. Their employers added to their dissatisfaction by using every guile to extend their period of contract (Adamson, 1972 : 50-56)⁸. At the completion of their stipulated terms of work some of the immigrants returned to India - but many opted to purchase small parcels of land and settle. In many cases all such land was only available within the environs of the sugar plantations. Also, saleable land was made extremely expensive which meant that only a few were able to purchase economic sized plots, hence many had to indulge in seasonal employment to supplement meagre farm incomes.

Thus by immigration the Colonists solved their immediate labour needs and by overt and covert Government policies were able to direct the settlement of the rural population in the vicinity of sugar plantations. To those who moved away from the estate environs and settled in rural villages along the coast, other policies were directed against them with the implicit intention of making them dependent on estate wage labour. Land for settlement and expansion of their food and cash crops were not easily available. In cases where land could be bought it was always at high prices

and was always marginal land subjected to the ravages of the sea or inundation from floods⁹. Estate workers who owned land or property were subjected to subtle pressures to give up their private ventures and to 'dedicate' themselves to estate employment.

By pursuing policies such as the above the Colonial Administration and the Planters were largely successful. Apart from the slow drift of negroes, creoles and a few Indians to the two main towns, the majority of the population was still rural and most of this population was located on the sugar estate or its environs. The few who lived away from the Estate's 'sphere of influence' practised peasant farming at a slightly-higher-than subsistence level. Those who lived within the Estate were more or less completely dominated by the 'Estate mentality', i.e. their lives were wrapped around the sugar estate. It offered employment for themselves and their children. Even if wages were just enough to 'keep body and soul together' the surety of employment was an opiate to which they succumbed and held on.

During this time, particularly since the end of indentureship, the labour force had been undergoing a rapid change both in structure and orientation to employment. An increasing proportion of women withdrew from the labour force. The proportion of adults in the working ages declined. More attention was on schooling which delayed entry for some. On the whole, the labour force was beginning to have a different orientation towards employment. Those seeking employment were selective in the type of employment entered. Higher class, i.e. mainly non-manual labour, was preferred to manual labour. Field labour on the sugar estates or in rice fields was regarded with distaste¹⁰. In complement to this, schooling became important as it was seen as the only way for children to escape a life of drudgery and toil¹¹. The drive for education was self-generative in a sense that increased awareness which was both a function of and a result of education. Because the education system in Guyana is not oriented towards rural needs school leavers had to migrate to urban areas where the probability of obtaining employment to commensurate with their level of education attained was highest¹².

Also rural areas, where the majority of the population still resided, had been experiencing high rates of population growth. The continuation of restrictive policies (especially towards land availability and patronage of sugar estates)¹³ resulted in high rates of unemployment. Ironically, the sugar estates had a low demand for labour now that it was in surplus. This was due to their continual policy of mechanisation in an effort to increase productivity and profitability. In the rice industry the same process had occurred, and mechanisation made redundant a large portion of rural labour, especially female labour. However, despite redundancies, the industry suffered from acute seasonal labour shortages. The disinclination for agricultural-manual work was strong. In some cases unemployment was preferred to working in rice fields. Thus, even in the face of rising unemployment, many of the rural unemployed preferred this situation rather than to perform as low-status manual labourers. In some ways it can be said that workers were gradually becoming aware of their lowly status their poor conditions of work and wages in relation to other attractive alternatives, which they strived to attain.

4. Population Growth :

The analysis of causes and trends

Population growth in Guyana can be analysed in four demographic periods.

(i) Slave and Indentureship Period.

This period encompasses the first two demographic phases of population growth in the country. They were both characterised by low birth and high mortality rates. This was due primarily to the high incidence of epidemics which was the natural outcome of poor hygiene, low nutrition and deplorable housing conditions in rural areas¹⁴. During the 1850-1860 decade alone three epidemics ravaged the population. First there was a yellow fever epidemic which lasted from 1853-1855 and was followed in 1856 by an outbreak of smallpox which was terminated the following year by an epidemic of cholera.

During the following 1860-1870 decade the incidence of epidemics was nearly the same as in the previous decade. However, between 1870 and 1880 conditions improved somewhat, but the rate of mortality was still high due to a weakened population and the indirect effects of the epidemics. This respite lasted until the end of the century. Soon after a new wave of epidemics began which lasted until the end of the period of immigration in 1918.

As a result of the epidemics, population increases were only due to the high net-immigration that occurred in this period. In some decades excessive mortality even resulted in a declining population, as the following analysis shows. During the 1861-1871 decade the colony received a net immigration of 54,924 persons (see Table 2) but the census of 1871 (see Table 1) showed an increase of only 45,465 persons signifying that deaths exceeded births by as much as 9,459 persons and that the increase of 45,465 persons was only due to immigration. The following 1881 census showed an increase of 55,695 persons, but again such an increase was only possible due to a net immigration of 64,227 persons implying that deaths again exceeded births by 5,532. Only in the decennium 1881-1891 was population increase over and above net immigration. This situation however did not continue for long. In the subsequent three decades (1891-1921) high mortality, due primarily to epidemics, resulted in a rate of population growth even lower than in the previous 1851-81 period.

TABLE 1

Population at Census Dates 1851-1970

| Year of Census | Males | Females | Total | Percentage Increase Census Period | Average Annual Increase |
|-------------------|---------|---------|---------|--|-------------------------------|
| 1851 | 67,267 | 60,428 | 127,695 | 30.12 | 3.0 |
| 1861 | 79,623 | 68,403 | 148,026 | 15.92 | 1.6 |
| 1871 | 108,791 | 84,700 | 193,491 | 30.71 | 3.0 |
| 1881 | 140,134 | 112,052 | 251,186 | 30.33 | 3.0 |
| 1891 | 151,759 | 126,569 | 278,328 | 10.37 | 1.0 |
| 1901 | 151,000 | 130,000 | 281,000 | .96 | .1 |
| 1911 | 153,717 | 142,524 | 296,041 | 5.35 | .5 |
| 1921 | 151,261 | 146,430 | 297,691 | .56 | .1 |
| 1931 | 155,381 | 155,552 | 310,933 | 4.45 | .5 |
| 1946 | 183,079 | 186,599 | 369,678 | 18.90 | 1.9 |
| 1960 | 279,128 | 281,202 | 560,330 | 51.57 | 3.7 |
| 1970 | 347,852 | 351,996 | 699,848 | 24.9 | 2.5 |

Source: Population Census Reports

TABLE 2

Immigrants to Guyana mainly under Indenture 1834-1918

| Year | Source | Immigrants |
|-----------|---------|----------------|
| 1838-1918 | India | 238,909 |
| 1835-1881 | Madeira | 32,216 |
| 1834-1867 | Africa | 14,060 |
| 1852-1884 | China | 13,533 |
| 1834-1845 | Europe | 381 |
| 1835-1867 | Other | <u>1,868</u> |
| Total | | <u>300,967</u> |

Source: G.W. Roberts and J. Bryne, Summary Statistics in
Indenture and Associated Migration affecting the West
Indies 1834-1918 Table 1.

(ii) Period of Transition.

The period 1921-1945 is known as the "demographic transitional period" (Sukdeo, 1973), between low growth in the slave and indenture periods to rapid growth in the post-war 1946-1970 period. Immigration ceased in 1918 allowing for the first time for population increases to be attributed to natural increases rather than to immigration. During the 1921-1945 period the occurrence of four factors changed the trend of population growth from slow to rapid. First, there were considerable improvements in public health (sanitation and medical care), nutrition and housing standards. Secondly, a concerted programme to combat epidemics began¹⁵. Thirdly, the equalisation of the sex ratio¹⁶ occurred and fourthly, the relatively more prolific East Indians in the population began to make large additions towards the number of births.

(iii) Period of Rapid Population Growth 1946-1959.

As can be observed from Table 1, the most rapid increases in the Guyanese population took place during the period 1946-1959. The birth rate rose from 38.8 per thousand at the beginning of the period, and remained in the 40's (per thousand) throughout the 1950 decade. Adult and infant mortality rate declined drastically. *Death* rates in 1959 declined by 35.5% of what it was in 1946. (See Table 3). As a result of high birth and falling death rates the rate of natural increase showed a steady increase. Throughout the period, the total population increased by approximately 190,000, or more than the natural increase of one hundred years previous to 1946.

TABLE 3
Birth Rate, Death Rate and Rate of Natural Increase and Infant Mortality
Rate Per 1000 Population 1946-1970

| Year | Birth Rate | Death Rate | Natural Increase | Infant Mortality |
|------|---------------|---------------|---------------------|---------------------|
| 1946 | 35.8 | 15.5 | 29.3 | - |
| 1948 | 43.3 | 14.2 | 29.1 | - |
| 1950 | 40.4 | 14.6 | 25.8 | - |
| 1952 | 44.3 | 13.5 | 30.8 | 81.8 |
| 1954 | 42.9 | 12.4 | 30.5 | 76.1 |
| 1956 | 43.2 | 11.2 | 32.0 | 68.4 |
| 1958 | 44.5 | 10.2 | 34.3 | 64.2 |
| 1960 | 42.9 | 9.5 | 33.4 | 61.3 |
| 1962 | 42.9 | 8.2 | 34.5 | |
| 1964 | 39.8 | 8.5 | 31.3 | |
| 1966 | 40.2 | 8.4 | 31.8 | |
| 1968 | 36.7 | 7.5 | 29.2 | |
| 1970 | 34.3 | 6.6 | 27.7 | |

Source: Population Census Reports

(iv) Period of Stability 1960-1970-

From 1960 onwards the population exhibited positive signs of stability and even a decline in the rate of increase. The average rate of birth in this period was lower by 20% than it was in the 1950's. Death rates continued to fall to the remarkably low rate of 6.6 deaths per thousand (population) in 1970 which is comparable to those of the more developed countries, such as Sweden. Rates of natural increase continued to climb until the early sixties when falling death rates caused a decline. Infant mortality rates, particularly East Indian mortality rates, declined remarkably (see Table 1 in Appendix). During this 24 year period a doubling of the 1946 population occurred (see Table 1).

The most important factors contributing to rapid population increases in the post-war period were the vast number of births that survived in the former 1921-45 period, and the high rate of survival within the 1946-70 period itself. However, the single most important contribution came from the East Indians, who rose to become the most populous ethnic group since the 1940's. By 1946 approximately 90% of East Indian women had children, compared to 78% of all other groups. Also the average number of children born alive per East Indian female was 5 compared to an average 4 among all other groups. In addition East Indians tend to have more daughters and to enter into union earlier (see Table 2 in Appendix). Another important factor was that the expectancy of life increased significantly. The average expectancy of life of females increased from 35.8 years in 1920-22 to 56.2 years by 1952, while that for men rose from 33.5 to 53.1 in the corresponding period.

5. Some Characteristics of the Population 1946-1970

(i) Structure and Dependency

An examination of Table 4 presented below shows that the population had undergone a remarkable structural change since 1946. Between 1946 and 1960 the proportion of the population below 15 years increased from 37.7% to 46.2%, or by 22% in the 14 year period. This was no doubt due to the increased births and falling infant mortality rate during the period. As a result of the large proportional increases in the young ages, the proportion in the active age groups - 15-44 declined relative to that in 1946 even when it numerically increased by over 50,000 persons. Similarly, the older age groups showed a relative decline. (For a detailed structure of the population see Table 3 in Appendix). During the 1960-70 inter-censal period the structure of the population remained more or less the same excepting that the 0-14 age group increased by a slight proportion. Overall, in the 24 year period the dependent population (0-14 years) increased from a little more than a third in 1946 to nearly one half in 1970.

TABLE 4
Structure of the Population 1946-1970

| Census Year | Percent Distribution by Age Group | | |
|-------------|-----------------------------------|-------|------|
| | 0-14 | 15-44 | 45+ |
| 1946 | 37.7 | 44.6 | 17.6 |
| 1960 | 46.2 | 38.4 | 15.4 |
| 1970 | 47.1 | 38.5 | 14.4 |

Source: Population Census Reports

The above situation of 47.1% of the population being below 15 years in 1970 attests to the relative youthfulness of the population. This age structure

biased towards the young has had considerable implications on dependency on the economically active population. It has recently been pointed out that this feature is a major constraint to economic development instead of an aid¹⁷. It necessitates a greater public expenditure on education, and on various social and child welfare programmes. Childbirth and child rearing tend to keep a large proportion of the labour force out of active service, and at the same time the 'upkeep' of a large number of children makes large 'inroads' into family incomes¹⁸. The following Table shows the change in youth and adult dependency on the economically active population over the period 1946-1970. For every 100 persons economically active there were 113 in the dependent ages in 1970.

TABLE 5
Showing Age Dependency 1946-1970

| Census Year | Percent of Population in Age Group | | | Youth Dependency Ratio | Aged Dependency Ratio | Total Dependency Ratio |
|----------------|---------------------------------------|-------|-----|------------------------------|-----------------------------|------------------------------|
| | 0-15 | 15-59 | 60+ | | | |
| 1946 | 37 | 56 | 6 | 68 | 11 | 79 |
| 1960 | 46 | 48 | 6 | 96 | 12 | 108 |
| 1970 | 47 | 47 | 6 | 100 | 13 | 113 |

Source: Population Census 1970 Summary Tables Statistical Bureau, Govt. of Guyana, p.iv (adjusted).

(ii) The Spatial Distribution of Population in Guyana

It is a general consensus that there is a mal-distribution of Guyana's population. With a population of less than one million and an areal extent of 83,000 square miles (214,000 square Km or the size of England and Wales) it is ironical for the country to have high densities and to experience population pressure. Yet it does both due mainly to the fact that about 2%

of the total land area on the coast supports 86% of the population, while the expansive interior of the country is sparsely populated. In 1970, the density in the interior of Guyana was .8 persons per square mile while that on the coast was 25.2 persons making an overall average of only 8.5 persons per square mile.

The overwhelming preference for coastal settlement was due to a number of historical and geographical factors. The relatively flat coastlands with fairly fertile clay soils were the natural choice of early settlement. As a result, the early plantations and their attendant population were established there. Because of its relative flatness (low gradient) and the limited permeability of the clay soils canals had to be dug to aid gravity drainage. This restricted the depth to which cultivation was feasible, hence expansion was 'sideways'. This resulted in a strip of between half to five miles wide along the sea coast being intensively cultivated and a ribbon type of settlement to be established. The majority of the population lived in groups of villages or small towns along the major roadway that follows the coastline.¹⁹

The interior population, with the exception of Linden-town, is made up of small concentrations in mining and forestry areas and scattered villages along the main river banks and in the savanna regions where the majority of Amerindians live. Excluding Linden the interior population is less than 10% of the total country's population. (Map 4 in Appendix shows the distribution of the population).

Geographically, the country is divided into three counties - Essequibo, Demerara and Berbice. (See Map 1 in Appendix). Having Georgetown - the main and capital city, and Linden - the second largest town after Georgetown, Demerara has always had a population twice that of the other two counties, as the Table below shows. Even without the major towns the population of Demerara exceeds that of either Berbice or Essequibo. But however, since 1946, proportionally, the population of Demerara has been contracting due to increases in Essequibo and Berbice and this has been so even in the face of substantial increases in the two major towns.

TABLE 6

Percentage Distribution of Population by Counties 1931-1970

| County | 1931 | 1946 | 1960 | 1970 |
|-----------|------|------|------|------|
| Demerara | 59.6 | 59.7 | 59.2 | 58.2 |
| Berbice | 24.4 | 26.1 | 25.4 | 26.2 |
| Essequibo | 16.0 | 14.2 | 15.4 | 15.6 |
| Total | 100 | 100 | 100 | 100 |

Source: Urban and Regional Planning Project Guy/74/005
Draft Working Papers 76/3-2, Nat. Physical Dev.
Strategy 2. Population p.7.

(iii) The Guyanese Labour Force

The size and structure of the labour force.

The labour force is taken to mean all those above 15 and below 65 years of age, but excludes those attending educational institutions and the retired or disabled.

In proportion to the total population the labour force has been declining. The main reason for this trend was because of the increasing youthfulness of the population. Between 1946 and 1970, as a proportion of the total population, the labour force declined from 58% to 49%. In numerical terms, however, it increased from 147,500 persons in 1946 to 210,000 in 1970, or by 42.4% when the total population more than doubled during the period. (See Table 8).

In its composition there was a marked predominance of males. Female participation in the labour force, as mentioned previously, has been declining since the end of indentureship in 1918. During the 1946-1970 period female participation was consistently below 30%. This low

participation was, according to Standing (1979), a product of 'dualism' in the economy. Sukdeo (1978) has shown that before mechanisation in the rice and sugar industries the proportion of females in employment was greater and that their withdrawal was a direct result of these processes.

Occupational distribution in the labour force.

Over the 1946-70 period there was a reasonably high degree of occupational change. In 1946 nearly half of all those employed were in agriculture. By 1970, however, this proportion declined to less than a third. A useful observation here is that agriculture did not only experience a proportional decline but an actual 13,589 persons moved out of agriculture - which is an indication of the rate of rural out-migration²⁰.

Over the 1960-70 period all industrial groups apart from services experienced a proportional decline in employment. Agriculture experienced the highest withdrawal while services gained massively, as the following table shows. It would have been a fair assumption that in a poor agriculturally dependent country such as Guyana the proportion employed in agriculture would be substantial and would remain at that level. But according to the table the more productive sectors, i.e. agriculture, manufacturing, etc. were, proportionally, losing employment to the relatively less productive service sector. (This seems to be the result of direct Government policies in an attempt to improve the welfare, i.e. services to the population. This was started by the P.P.P. Government in the late 1950's and early 1960's and was accelerated by the present P.N.C. Government in keeping with its Socialist philosophy.

TABLE 7

Distribution of Working Population by Industrial Group 1946-1970

| Industry | 1946 | 1960 | 1970 | % Increase 1970-1960 |
|---|------|------|------|-------------------------|
| Agriculture | 46.2 | 37.1 | 29.0 | -21.8 |
| Manufacturing | 15.9 | 16.3 | 15.0 | - 7.9 |
| Commerce | 8.2 | 11.4 | 10.8 | - 5.2 |
| Services | 16.9 | 18.6 | 28.8 | 54.8 |
| Other, including Mining, Transport and Construction | 12.0 | 16.5 | 14.3 | -13.3 |
| Not Stated | .8 | .1 | 2.1 | - |
| Total | 100 | 100 | 100 | - |

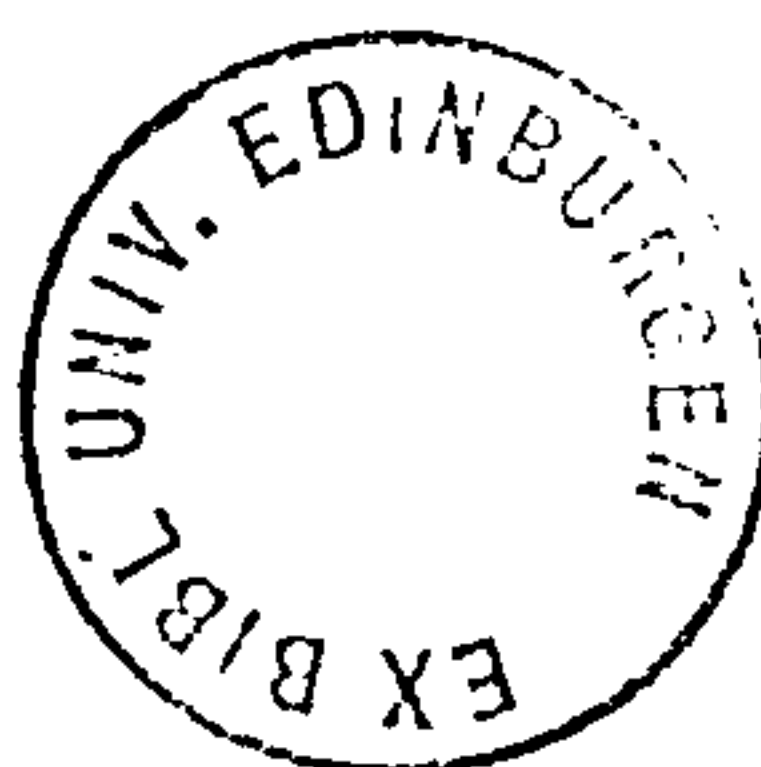
Source: Population Census Reports

(iv) Employment and Unemployment of the Labour Force

Without exception, almost all of the observers of the Guyanese economy, in the post-war period, have commented on the slow growth of employment in relation to population growth and the consequences of this for economic growth and social development.

During the 24 year period between 1946 and 1970, while the total population increased by 90% or by nearly 340,000 persons, the number in employment (or jobs) increased by only 21.9% or 32,000 over that of 1946. This meant that there was only one person employed for every eleven persons added to the population, which implied that a large proportion of the labour force was always unemployed.²¹

An examination of Table 8 below shows this to be largely true. In the period of rapid population growth, i.e. in the 1946-60 period, the number unemployed rose tremendously. From a little over one thousand in 1946 it rose to nearly fourteen thousand in 1960, or from .8% of the labour force to 7.9% in the period. The upward spiral in the unemployment rate continued in the first half of the 1960's but slowed down since²². Nevertheless, taking the



1960-70 period the actual number unemployed was more than doubled. The rate of unemployment increased from 7.9% of the labour force in 1960 to over 15% in 1970.

TABLE 8
Labour Force, Employment and Unemployment 1946-1970

| In Thousands | | | |
|--------------------------|--------------|--------------|-------------|
| | 1946 | 1960 | 1970 |
| A Employed | <u>146.2</u> | <u>161.2</u> | <u>178.</u> |
| Males | 105.6 | 124.5 | 133. |
| Females | 40.6 | 36.7 | 45. |
| B Unemployed | <u>1.3</u> | <u>13.8</u> | <u>32.</u> |
| C Labour Force | <u>147.5</u> | <u>175.</u> | <u>210.</u> |
| Males | 106.5 | 134.1 | 150. |
| Females | 41. | 40.9 | 60. |
| D Rate of Unemployment % | <u>.8</u> | <u>7.9</u> | <u>15.2</u> |

Sources: A-C Govt. of Guyana, Second Dev. Plan 1972-76
Min. of Econ. Dev., p.155

D Own calculation. (This Table was compiled from six sources in which the definition of the labour force and unemployment is not strictly the same. As such the percentages in D do not even out).

Since unemployment tends not to spread evenly throughout the labour force but to concentrate in the lower ages it meant that unemployment in the juvenile age groups, i.e. 15-19 and 20-24 was highest. An indication of this rate can be obtained from the following illustration. During the period

1960-1970 the total persons employed increased by 17,000. The additions to the labour force from the age groups of 15-19 and 20-24 (after adjusting for rate of participation in these groups) was 59,160. Assuming all the new jobs were given to this group then only three in every ten, or, more precisely, only 29 in every 100 were employed. This then meant that the rate of unemployment among the ages of 15 to 24 was a phenomenal 71%. (See Table 2 in Appendix for the population by age groups).

Regionally, the rates of unemployment have been found to differ substantially. In 1965 the Man Power Survey found that rural areas, had a higher than the national average rate of unemployment with certain regions, e.g. West Berbice, having rates which were twice that of urban areas. Thus overall, the rate of unemployment was high, with the highest rates among the new entrants to the labour force and in rural areas.

To trace the exact causes of this situation is beyond the scope of this introduction. However, the main causes of high unemployment are here mentioned. First, since the 1950's the sugar industry - a major employer, had embarked on a policy of mechanisation in the field and factory. This led to a marked 'decasualisation' of the estate's labour force which growth it nurtured in the first instance. This policy was pursued with much vigour. During the 1950-61 period alone the industry reduced its labour requirements by nearly one quarter (Reubens and Reubens, 1962). Field operations which employed the majority of the sugar estate's labour experienced the greatest decline even when, as Sukdeo (1978) shows, the industry benefited from high productivity and an increase in total output²³.

Secondly, the rice cultivation which was a traditional labour intensive activity and which employed the majority of rural labour began to mechanise. The advent of the tractor and combine harvester completely altered the regimen of production. Sowing and reaping, which were the main farming activities, now needed small amounts of labour. Thus mechanisation here too has resulted in an increase in the rate of unemployment²⁴.

6. Administrative and Political Developments

In 1928 Guyana became a full Crown Colony but it was not until the late forties that the electorate had any real participation in the internal governing of the Colony. Under a new constitution granted in 1943 the first elections were held in 1947. Although the ballot was restricted to property and literacy qualifications, events were not closeted in the elite circles rather there was an awakening of political and social consciousness in the country²⁵. The usually indifferent East Indians began to shed their rural outlook and became more and more conscious of the lowly roles they were fulfilling. Africans had been rapidly improving their education and were filling Civil and Public Service posts while they remained in the stagnant rural areas eeking a livelihood out of agriculture. For them (the East Indians) the outcome of the elections was relatively unimportant save for the fact that it ushered in Cheddie Jagan (a Guyanese of East Indian descent) into Guyanese politics.

Returning from studies in the United States he was incensed by what he saw as oppression and exploitation of the Guyanese people²⁶. Having won a seat in the 1947 elections he embarked on a campaign against Colonial rule and against the agents of exploitation, i.e. the Sugar Barons. First, with the help of Forbes Burnham, a barrister of African descent, he launched the ... "first truly national political party" - the P.P.P. (Mitchell et al, 1969 : 43). Dedicated to the goals of ownership and Guianisation of foreign enterprises and independence, the party gained popular appeal - and won a number of concessions in voting rights etc. In the following election of 1953 in which all adults were allowed to vote the party gained an overwhelming victory. It received 51% of the ballot and obtained 18 out of the 24 seats in the Legislature. Thus for the first time the internal government of the colony was the choice of the majority of its people.

Before its accession to office the party (P.P.P.) had a strong socialist orientation. Its leader, Jagan, had declared himself to be a Marxist, and 'to all intents and purposes' his radical policies seemed to create a Socialist State in Guyana. This was highly resented by the business community

and by the more literate groups, on the whole. Thus in its attempt to implement its (radical) manifesto promises it met with severe opposition. In the sugar industry it attempted to have the union of its choice recognised as the principal bargaining agent²⁷. This generated the greatest opposition - which finally led to the downfall of the Government after only 133 days in office, and the suspension of the Constitution²⁸.

In the period between the suspension of the Government and the next general elections an Interim Government was appointed. While out of office a split in the leadership of the P.P.P. occurred with Burnham departing to form his own political party (P.N.C.)²⁹. Despite the fact that policy differences may have been the principal cause of the split the division was chiefly along ethnic lines³⁰. In the campaign for the next elections, held in 1957, both factions appealed indirectly to their respective ethnic groups. Because voting tended to be along ethnic lines the P.P.P. emerged as the most popular party in the rural areas where East Indians predominate. The P.N.C. similarly polled most votes in the urban working class districts where the majority of negroes reside. Overall, due to the larger East Indian population, the P.P.P. was returned to office.

In their new period of office the P.P.P. bemoaned the fact that they had no real power to implement changes³¹. The Governor, who was the Constitutional head in the Colony, had the ultimate veto power in nullifying legislations he did not approve of. Hence, this period of Government was characterised by numerous 'clashes' between the elected assembly and the Governor as an agent of the Colonial Office. However, the most notable contribution of the 'Jagan Government' during this period was its generous aid to agriculture. A review of the programme of expenditure (shown in the following section) shows that expenditure in agricultural and related sectors accounted for almost half of the total development expenditure for the planned 1957-61 period. The East Indians who were the main land-owning group in the rural areas were the main beneficiaries.

In the following 1961 general elections, which were held under a new bicameral system³², the Government was returned to office and, in similar

manner as in 1953, it tried to re-introduce its labour relations bill which was directed against the sugar producers³³. As in 1953, a long general strike resulted which was punctuated this time by numerous incidents of arson and violence³⁴. This time too the opposition forces and the entire organised labour movement rallied and called a crippling general strike in which widespread civil disturbances and riots swept the country³⁵. Finally, the Government withdrew its bill but the consequences resulting from the disturbances were to a great degree irreparable. Acting as the mediator in trying to resolve the growing conflict among the political groups, the Colonial Office proposed a new constitution of proportional representation. In new elections under this system in 1964 the P.P.P. was unable to secure the 27 seats needed to form a Government in the new 52 seat assembly. This the two main opposition parties (the P.N.C. and the newly formed U.F.) were able to do and so formed the new Government with Burnham as the Premier.³⁶

As the head of the new Government Burnham faced what seemed an impossible task. It was the widespread opinion that the new Government would fall in a matter of months. But, contrary to predictions, the Government took the necessary steps to consolidate itself in office. Burnham announced a new system of "Consultative Democracy" to ensure at least some consultation with the electorate before the Government proceeded with a policy - quite the opposite of what occurred during the reign of the P.P.P. Overnight, Burnham was said to have grown in stature and had become a Statesman. The post of Premier, usually regarded as a 'denigrated' gift from the Colonialists, was changed into one of respectability and one which became the centre of a policy making Government.

With Peter D'Aguiar (an Industrialist) as Minister of Finance, the new government enjoyed a period of considerable success in its economic policy. An influx of foreign investment followed the demise of the Jaganite threat of Communist takeover. The Government had the support of the commercial interests, the Public Service machinery and the security forces in which a majority of the personnel were Africans and so, by and large, supporters of the P.N.C. In pacifying internal ethnic strife the Government also made some useful gains. It did not by any means gain the confidence and support

of the disgruntled Indians, but at least it allayed their worst fears.³⁷ It held its reactionary arm in control, and thus no major inter-ethnic conflicts occurred. Armed with peace and some degree of stability Burnham approached the Colonial Authorities for complete independence which promised a stable administration. The Colonial Office conceded and thus, after 20 years of struggle, the colony of Guyana was declared an independent state on 26 May 1966. In 1968 the P.N.C. Government was returned to office, this time without recourse to a coalition.

(i) Implications for Migration

The administrative and political developments in the post-war period in Guyana had direct implications on the level of population mobility that is observed. In fact the rate of mobility can be regarded as a function of political activity in the 1947-70 period. As mentioned, since the late 1940's and throughout the 1950's there was a slow out-migration of negroes from rural areas. Since this group was the most literate (of the two) groups, it is expected that many found jobs in the various Government Services. East Indians, on the other hand, were generally less educated and tended to be less mobile in that they were farmers or sugar estate labourers. Before the 1960's this group accounted for only a small proportion of urban population; hence, few rural persons had close relatives in Georgetown and New Amsterdam and, in any case, most East Indians either had a sugar-estate or rice-farming background and were thus unsuitable for most urban jobs. Moreover, in rural areas high investments were made in agriculture to their benefit, which served to reinforce their traditional immobility.

In addition to establishing land development and settlement schemes, the P.P.P. Government went further - it secured new markets in Cuba etc. for rice produced by the East Indians. Machinery and fuel to farmers were subsidised. Generous grants and loans were made for machinery purchases etc. Prices were high in relation to production costs. Rice farmers, especially the medium sized and large operators, experienced relative degrees of prosperity. The change of government in 1964, however, was a

disaster for rice farmers as it not only removed the subsidies and other benefits to them but failed to link prices of agricultural produce with the costs of production. The pattern of high investments in agriculture (in proportion to other sectors) was changed. Expenditure on social and welfare services increased instead. The result of this was that the small farmers became progressively poorer with many pushed out of agriculture altogether. Out of their usual source of livelihood, farmers and farm-labourers had no option but to migrate towards Georgetown seeking non-agricultural or other employment.

The change of Government also resulted in intense politicking. To consolidate their power the P.N.C. Government had embarked on a number of job creation projects in which jobs tended to go to party supporters, the majority of whom were negroes. The development impetus was switched from rural areas to urban where the majority of negroes were located. These developments served to accelerate the out-migration of negroes from rural areas. But not only did negroes move: East Indians moved also. Since the beginning of the 1960-70 decade schooling had featured high on their list of priorities. Increasingly they moved with the intention of entering into Government and related employment as their negro counterparts had been doing.

The periodic rekindling of social feelings at times of elections has served to alienate the two groups. The major disturbances and riots of the 1963-64 period have resulted in the displacement of a considerable number of persons who fled from villages where they were in a minority to villages where their ethnic group was in majority or equal to the other race. (The result is the peculiar ethnic pattern of settlement in which one village, almost entirely populated by one group, exists adjacent to another peopled by the other. In terms of employment, the implication of racial animosity (both latent and open) was that it restricted mobility. Few East Indians moved to Linden in spite of very attractive wages. Similarly, negroes were disinclined to move to sugar estate areas where East Indians predominate. But, since large numbers of both groups were in Georgetown it had been the common destination of negroes and East Indians.

7. Post-War Planning in Guyana

In dependent countries such as Guyana it was observed that market forces, if left at will, will not lead to economic development - a necessary precondition if the goals of an improvement in the social and economic life of its inhabitants were to be achieved. To attain the necessary level and rate of economic growth it was realised that careful planning in the economy was necessary. Such planning, it was realised, could take either of two approaches. Either the State could first decide its goals and, by fiscal and other incentives, re-direct market forces and encourage private investment in such a way that the pre-determined goals and objectives are the indirect outcomes of such investments; or, it can adopt the Socialist approach whereby the principal means of production are owned by the State and private and individual enterprises are directed to conform to the national framework or plan of development.

The path that the post-war Governments of Guyana took prior to 1964 has been described as a "quasi-inducement" approach in that it was between the two approaches outlined above (David, 1969 : 395). After 1964, the new Government that purported a Socialist image made a number of positive steps in that direction. Hence, it heralded a change in the form and context of planning. The basic aim of attaining economic growth was modified by high welfare considerations. In both approaches to development, the mobility of the population was directly influenced. In some ways it can be said that the latter approach (i.e. the P.N.C. brand of Socialism) accelerated mobility.

(i) Economic Planning 1945-1972

Planning in Guyana began since 1945 when an allocation of \$12 million was received under the Colonial Development Welfare Act of that year, but the first rudimentary attempt at real plan making and execution of same began in 1947, when a 10 year development plan was drawn up. Expenditure in this plan was allocated under the following headings: drainage and

irrigation projects (\$6.5 million); social welfare, justice and public buildings (\$11.2 million); agriculture, forestry, transport, surveys and research (\$10.3 million). It was planned to spend \$20 million in the first 5 years with an additional \$6 million later. However, in the first 3 years 1947-50, only \$2 million or 10% of expenditure planned was spent. The most plausible explanation of this was that planning was a new activity and, as such, there was a lack of planning experience, and/or the basic infrastructure in the country was inadequate for the execution of planned projects.

In 1953, at the request of the Government, an Economic Survey Mission from the International Bank for Reconstruction and Development (World Bank) visited the country. The main objectives of the mission were to make a survey of the economy as a whole, and to make recommendations on the level and directions of future investment - taking into consideration internal and external financial resources which were, or would be, made available to the country. The main findings of the Mission were that, on the whole, the economic climate was healthy, but there were a number of problems that tended to retard the pace of growth and development. In the recently completed (then) 1946-52 programme the Mission pointed out that there was a lack of an integrated development programme and as such there was a tendency to indulge in ad-hoc planning, among other things³⁸.

As part of their 'terms of reference' the Mission prepared and submitted a Five Year Development Programme for the 1954-58 period. This programme aimed at increasing the national income by 20% and income per head by 6% in the planned period. This increase was seen as necessary to maintain or improve the standard of living in view of the rapid population growth the nation was experiencing. In order to achieve the above aim four objectives were outlined. The first was to strengthen, as rapidly as the technical resources of the colony would permit, those sectors which appeared most urgently in need of improvement in order to provide a better balance in the economy. Second was to provide for continued progress in those sectors where the economy was already strong. Third was to provide a programme of technical research and experimentation in agriculture and

related fields such as soil, geologic, hydrographic, topographic and others which was a prerequisite for the development of the colony's resources, both during the next five years and thereafter. Fourth was to stimulate local savings and investment in order to reduce the dependence of the economy on external grants and capital inflows. The salient features of the plan are presented in the Table below.

TABLE 9

The Five Year Government Development Programme 1954-1958 as Recommended by the I.B.R.D. Mission

| <u>Investment Programme (G\$7,000)</u> | | |
|---|---------------|---------------|
| 1. Agriculture | | 24,487 |
| (i) Drainage & Irrigation Projects | \$10,780 | |
| (ii) Land Settlement | 1,150 | |
| (iii) Rice Development Corporation | 5,000 | |
| (iv) Other Agricultural Projects | 1,106 | |
| (v) Research & Surveys | 2,251 | |
| (vi) Agricultural Credits | 4,200 | |
| | <u>24,487</u> | |
| 2. Transport & Communications | | 22,304 |
| 3. Forestry | | 2,280 |
| 4. Social Welfare | | 7,450 |
| 5. Public Works (including Sea Defences) | | 5,450 |
| 6. Industrial Credits | | 1,500 |
| 7. Hydro Electric Power (Tunmatumari Project) | | 1,440 |
| 8. Surveys - Geologic etc. | | 400 |
| 9. Credit Corporation | | <u>600</u> |
| Total | | <u>65,911</u> |

Source: I.B.R.D., The Economic Development of British Guiana,
pp. 30-36.

The pattern of development that followed was determined by the expenditure pattern planned. More land was to be brought into cultivation through two large drainage and irrigation schemes. High priority was to be given to the improvement of transport and communications. Overall, the plan was committed to the existing pattern of coastal development with only exploratory surveys of the interior resources.

This emphasis on the coast, to the relative exclusion of the vast interior, was one of the major failings of the plan, according to Guyanese Economist Wilfred David (1969). The bias given to the development of rice as an export commodity was, according to him, misguided, in terms of the slow rate of return of such investment. However, the Mission's strategy can be justified by their stated remit that "it was wisest to invest in projects which promised the most returns to the colony in the light of the financial resources, technical staff ... manpower and the time needed for engineering planning" (I.B.R.D., 1953 : 25).

Further, the Mission categorically stated that a stable political climate was necessary to attract outside capital and accelerate internal investment. Sadly, however, this was not to be. During this period Guyana experienced its worst period of political instability. The effect of this was that most of the planned investments were not realised due to an acute shortage of capital, which was due to the non-occurrence of expected foreign investment.

In 1959, the newly elected Government did not proceed with the I.B.R.D. programme. It requested the drawing up of a new one which planned for the expenditure of 44 million dollars. Of this, 33 million was for economic activities and the remainder was allocated to social services. No firm assessment of this plan is available. In an attempt at such a task David (1969) shows that G.D.P., at factor cost, rose by 32 million dollars between 1956 and 1959, which was by no means spectacular, but nevertheless, in view of past performances, it can be regarded as a fair rate of overall growth.

In 1959 a new programme was considered necessary, and was drawn up by Mr Kenneth Berrill, an Oxford Economist. The new programme was aimed

at both the economic and social development of the country, but again, emphasis was on projects that were expected to increase productivity and strengthen the economic sector, i.e. such projects as drainage and irrigation, and land development. As such, this plan was in the same vein as that advocated by the World Bank Team, excepting that there was a stronger emphasis on agriculture in terms of the proportion of development expenditure devoted to it. The following Table presents a summary of Berrill's (1960-64) five year Development Plan.

TABLE 10

Development Programme 1960-1964 (G\$.000)

| <u>Allocation of Expenditure</u> | |
|---|----------------|
| Agriculture (including Sea Defences, Drainage, & Irrigation and Land Development | 49,040 |
| Transport & Communications | 25,457 |
| Forestry | 550 |
| Surveys (geological etc.) | 4,700 |
| Public Buildings | 1,300 |
| Credits agricultural & industrial | <u>11,000</u> |
| <u>Total Economic Sector</u> | <u>92,407</u> |
| Education | 4,140 |
| Health | 893 |
| Housing | 6,000 |
| Social Welfare | 750 |
| Rural Water Supply | 2,882 |
| Credit, Housing | 2,000 |
| Miscellaneous | 1,568 |
| <u>Total Social Sector</u> | <u>17,873</u> |
| Total All Sectors | <u>110,280</u> |

Source: Wilfred David, The Economic Development of Guyana 1953-1964;
Table 3, p.353.

This plan too, by devoting the lion's share of expenditure to agriculture and related, attracted much criticism from Planners who did not see the expansion of agriculture as the answer to the country's economic problems. Newman (1960) and others argued that heavy industry based on the country's natural resources of bauxite, manganese, timber, etc. should be the basis of its long term development. Agricultural and light industry should be just an aid to transition to industrial development, and thus high expenditure in those sectors was unwarranted. However, Berrill defended his programme by showing that heavy industry was a new venture while infrastructure and resources were readily available for agricultural expansion, and furthermore, the country was unable to raise finance for such an ambitious programme, i.e. one that included industrial as well as agricultural development. This plan too was not allowed its full course. Political instability (1963-64) again undermined the economic climate. However, some of the major aspects of the plan, in land settlement schemes and drainage and irrigation projects, were completed, and expenditure targets in a number of others were met³⁹.

At the end of the period of internal hostilities of 1963-64 the new Coalition Government that came to office presented a new strategy of development. Their first five year Development Plan, prepared by the eminent West Indian Economist W.A. Lewis, aimed primarily at reducing the level of unemployment which had risen dramatically in both urban and rural areas over the recent years. The strategy was to increase public expenditure on projects such as school building, sea defence, roads, etc., and thus, while it provided for some respite from high unemployment infrastructure for long term development would be laid. The new programme also devoted considerably more expenditure to social and welfare developments. Although it did not terminate agricultural projects work continued in a low profile. It even started a more genuine attempt at agricultural diversification. The main importance of this programme, however was that it was devoted massively to industrial development. Total expenditure planned for the five year period was estimated at 294 million (Guyana) dollars, which was expected to generate an annual growth of 6% over the planned period.

The new approach, whereby agricultural development was balanced with

industrial and where social and welfare services featured heavily, was hailed by the Government as the first real attempt in planning. As to exactly how successful it was, it is not possible to state here. Much of the programme seemed to have been rolled over into the following 1972-76 planned period.

(ii) Implications for Migration

The impact of the post-war 'Plans' or Development Programmes on population mobility in the country depended on the allocation of development expenditure in those plans. The earlier Programmes, including those adopted by the P.P.P. Government, were committed to agricultural development (mainly in rice farming), which tended to ruralise the largest portion of the rural population. The later Programme of the P.N.C. Government, on the other hand, concentrated on social and industrial development and relatively de-emphasised agriculture, which resulted in a substantial rural outflow. Of the two main groups, negroes were always more prone to migrate. Since there were fewer negro farmers the East Indians tended to benefit most from the generous expenditure on land settlement schemes, drainage and irrigation projects and the overall patronage in rice production. While this resulted in the East Indians being more sedentary, it caused the now recipient negroes to out-migrate from rural areas. One factor that exerted a pull on a portion of the negro population was that they were relatively more educated than East Indians and moved to take up employment in the various Government Services in the city.

The failure of all the Programmes to seriously take into consideration the rate of population growth and the increase in unemployment has proved to be a notable contribution to mobility. The land development drive benefited a small percentage of the small farmers and the landless. Most of the schemes were far too costly in terms of the number of persons who received direct benefits⁴⁰. Overall, the land-sharing was still tightly controlled, which led to increased fragmentation of existing land and higher rates of unemployment and open unemployment. The Programmes (or Planners) were indifferent

to the effects of mechanisation on rural unemployment, as few alternative rural employment opportunities were provided to absorb redundant labour. The result was that, in the face of contracting rural opportunities, persons who would not normally have migrated did so in search of better opportunities. Hence, through its failings, planning in the post-war period (prior to '64) has even increased the level of rural out-migration.⁴¹

The change of Government in 1964 resulted in a change of development strategy which, more than the former, increased population mobility (mainly rural-urban movements). By reducing the amount of public expenditure on agriculture in relation to other sectors, the rice industry suffered a decline.⁴² Marginal farmers discontinued farming for wage employment, and this eventually turned out to be their first move towards urban areas where economic opportunities were perceived to be greater. By giving a high priority to the lowering of unemployment the 1966-72 five year Development Plan accelerated the rural-urban migration of negroes who migrated in the hope of employment in the many Government projects.⁴³ Hence, in the country, rapidly increasing population growth, increasing unemployment because of mechanisation and low profitability in agriculture, coupled with the orientation of the labour force to urban white and blue collar employment and the system of Government and its development strategy, have laid the foundations for rapid rural out-migration. The following chapter, in greater detail, seeks to define who the migrants were, the main reasons for their migration, and the patterns in which the flows have occurred, and finally to venture into some of the ramifications and consequences of such flows.

CHAPTER III

THE CHARACTERISTICS, CAUSES, PATTERNS AND IMPLICATIONS OF INTERNAL MIGRATION IN GUYANA

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1. Introduction

From the previous chapter it will be noted that Guyana is one of the countries emerging from a long period of Colonial domination. It was used by its owners primarily to extract wealth in the form of cheap raw materials by manipulating and orienting the labour force to that end. The result of this and the short-term palliatives it employed was that it led to a steady impoverishment of rural areas, especially in the face of rapid population growth and rising unemployment which the country has been experiencing since the end of the Second World War.

Faced with the above situation, a significant proportion of the rural proletariat began to look elsewhere for a source of livelihood - away from peasant agriculture which was fraught with 'impediments', and from sugar-estate wage employment which was becoming scarcer and which allowed a livelihood at subsistence level for most¹. Many left their areas of origin in the 'path' that was already established, as in the case of Africans, for the urban areas where employment and general conditions of living were better, or, at least, seemed to be so.

This movement was not without significance to the sending areas. Increased population growth coupled with an increasing awareness of the greater income and other potentials 'outside', compared to the depressing conditions in their village, have led to a quickening of the outward drift. Rural areas, on the whole, have progressed from being raw-material producer in the Colonialist period to a human resource exporter in this modern era. How and why this came to be so this chapter proposes to clarify. First of all, it indicates the magnitude of rural and urban migration prior to 1970. It then notes some of the salient characteristics of those who migrate, and briefly posits some of the broad reasons as to why they have

left rural for urban areas. To give a better approximation of the pattern of inter-rural and rural-urban mobility the movement between the 1960-1970 intercensal years will be examined in greater detail. The chapter concludes by outlining some of the implications that the migration pattern is likely to have on both sending and receiving areas.

2. Extent of Inter-Rural and Rural-Urban Migration in Guyana

(i) The Origin of Guyanese Migration

Migration in Guyana is not new, in fact from a social and economic point of view, the history of the country can be best portrayed by the analysis of the developments relating to the population and its mobility. The extent and pattern of the Guyanese labour mobility was first set by the Africans.

Ex-slaves, who were not keen to continue to serve their former masters as wage-labourers, were not allowed to remain in estate housing nor to cultivate food crops on estate land.² As previously mentioned, it was exceedingly difficult for them to own or occupy State lands. Thus many had no alternative but to migrate to the townships of New Amsterdam and Georgetown where casual jobs could be had in the informal sector and formal employment in social and public services. Their presence in the towns served as an incentive for other Africans, i.e. kinfolk and close friends etc., to follow in their path. As a result, in 1970 approximately half of the country's African population resided in urban or suburban areas.

During and after the end of indentureship in Guyana a growing proportion of East Indians tended to follow in the same pattern taken by the Africans, and for nearly the same reasons excepting that while Africans came to urban areas mainly for employment, many Indians came as petty traders and businessmen. Their initial rate of inflow, however, was much slower than the Africans and has continued to be so. Because they too, like the Africans, had strong ethnic, cultural and familial ties, they tended to draw or accelerate the flow of other East Indians to urban areas, and to provide

the necessary information and help to the newcomers in establishing themselves³.

(ii) Migrants in the Population

Prior to the census of 1960 only crude estimates were available as to the extent of the mobility of labour, i.e. the number of migrants in the population at any one time or place⁴. The census of 1960 recorded the fact that one in every four persons in the country was enumerated at a place other than that of his birth, which was astonishing, given the then low level of transport development, information dissemination and adult literacy. Even if it was expected that the urban population would have a sizeable migrant component it was certainly not in the vicinity of one in every three persons as the census showed⁵. Even more remarkable was that migrants were found to constitute more than one half of the total population of the townships of New Amsterdam and Linden. Rural areas adjacent to Georgetown (see Table presented below) also seem to have a fair share of migrants, especially East Bank and West Demerara, where migrant percentages were 38 and 27% respectively. Another observation of the census was that one fifth of the population of rural areas were migrants to those areas, which seems somewhat high considering the sedentary nature of rural life.

However, the proportion of migrants in rural areas should be regarded with some reservations due to the census definition of migrants. enumerated at a place other than that of their birth were regarded as migrants to that place⁶. Thus, births in any of the three main hospitals that were not located in their usual area of residence were regarded as migrants there⁷. It was also customary for East Indian females to have their first, or first few births, at their parents' residence. However, despite such discrepancies, the census of 1960 provided valuable insight as to the pattern and the real extent of internal mobility in the country as a whole.

The following, 'decennial', census of 1970 had further startling observations. Throughout the country the population not residing at their place of birth increased from one quarter to nearly one third of the entire population

in the interval of only ten years, which points to a significant increase in the rate of mobility of the population (see Table 9 in Appendix). All population areas, with the exception of West Berbice, showed an increase in the number of migrants in their populations. Observing Georgetown as a whole, although the number of migrants increased by an insignificant 13% the increase of the migrant population in the suburban area was nearly 150%⁸ which, more than amply, compensated for the city-centre's low attraction. The outlying semi-suburban areas of East Bank and East Coast of Demerara experienced inflows which increased their migrant component to 53 and 42% respectively. The Upper Demerara district, mainly the town of Linden, remained attractive to migrants. Its proportion of migrants in the population increased by 36% over the 1960-70 period. The generally more depressed areas, i.e. New Amsterdam, Essequibo and the Interior regions, had fewer migrants.

However, despite the reasonably high migrant increases in most of the districts, the proportion of migrants to the origin (resident) population declined with the exception of Georgetown, its suburbs and the East Coast of Demerara. The reason for this was that there was a high rate of natural increase which was fuelled by in-migration. Overall, migrants in 1970 constituted 36.3% of the population in urban areas and 22% in rural areas.

3. Characteristics of Guyanese Migration

There is reason to suggest that migration, as it occurs in Guyana, is, in some ways, slightly different from that occurring in Latin America and other countries. The basis of this difference is due to the fact that the pattern of migration, as previously mentioned, was preconditioned by historical and cultural factors. Each of the two main population groups originated from different ethnic and cultural backgrounds have imbibed 'Western values' at different rates and so have adapted differently to changing social and economic conditions in the country. The East Indians settled principally in the rural areas and tended to be self-sufficient, while Africans

- a great proportion of whom came to depend on wage-employment - migrated to urban areas where such employment could be found.

In view of the above and on previous information given in Chapter 2 it is possible to make some deductions as to who the migrants were and the pattern in which they have migrated. It is likely that:

1. The age at which migration occurred was more or less the same as in other Latin American and other Developing Countries.
2. As in Latin America, females would have a higher tendency to migrate than males.
3. Taking the two major ethnic groups in the country the rate and direction of migration in any one group was directly related to the proportion of that group in the destination population. (As such, since Negroes predominated in urban populations it is expected that Negroes would be the majority in rural-to-urban migrant flows.)
- 4(i). Since education is the main criterion in employment recruitment and the determining factor in remuneration then it is obvious that a greater proportion of rural persons with higher education will proceed to Georgetown and the suburbs where the high income jobs were available.
- 4(ii). Given the urban-rural disparity in the level of educational facilities it was expected that, on average, rural-to-urban migrants would be less educated than the origin (urban) population.
5. Although rural-to-urban migrants might have had a lower educational attainment than urban populations they were not marginalised in a sense that they occupied mainly low income occupations.

(i) Age of Migrants

In the absence of specific (formal) data on the age at which rural-urban migration occurs in Guyana it is assumed that it occurs within the traditional 'age of migration', i.e. between the ages of 15 and 40, as a number of researchers in Latin America and elsewhere have found⁹. This age

assumption in migration seems particularly valid since migration, as will be shown later, is undertaken directly and indirectly in search of employment. Since it is the young who are most likely to be involved in job search then it is these persons who were most likely to have migrated. On average, inter-urban migrants were expected to be slightly older than rural-urban since they would have spent some years in employment at that previous place of origin.

(ii) Migrants by Sex

A casual observation of Guyanese migration gives the impression that the male/female ratio is equal in the migrant streams. A closer examination, however, shows that proportionally females exceeded males, on average, and taking both in-migrant and out-migrant streams they exhibited a higher rate, i.e. were more migratory than males but did not 'predominate' in the flows.

As expected, urban areas seemed to attract more females. Out of every 1000 persons entering urban areas prior to 1970, 533 were females and out of every 1000 migrants remaining (subtracting in- from out-migrants) females comprised 550 of such persons.⁹ In rural areas the sex ratio of in-migrants was more or less equal, but in their out-migration, females again exceeded males in volume due to their higher rate of out-migration of 220/1000 compared to males 182/1000. In view of the above rates, the sex composition of migrants in Guyana is similar to the observed pattern in Latin America (cf. Gilbert, 1974 : 113, and Browning, 1970 : 287) and is in accordance with Ravenstein's '7th Law of migration', which states that females are more migratory than males.¹⁰

(iii) Migrants by Ethnicity

The two main ethnic groups, Africans and East Indians, comprised approximately 85% of all migrations in the country. Africans, while comprising only 21% of the rural population, accounted for 58% of rural to urban migrations. East Indians, on the other hand, were 66% of the rural

population but only accounted for 24% of rural to urban migrations. As mentioned in Chapter 2, this African dominance in urban migration was due to historical factors. Ever since their emancipation, Africans continued to move to urban areas. As the dominant group there they eventually were established in key employment positions, i.e. administrative and managerial, which tended to make it easy for others of their own ethnic group to enter into urban employment through both formal and informal recruitment practices. Also, the strength of their cultural ties tended to confer paternalistic rights or allow the development of such attitudes by residents or previous migrants over the newly arrived migrant. These two factors made it relatively easier for Africans to migrate compared to other ethnic groups. Hence, the steady and greater flow of such persons to the urban areas of the country.¹¹

In the absence of relevant statistical information the following illustration is presented to give some credence to the above statement - that Africans have a higher rate of out-migration from rural areas than the more populous East Indian group. The rural area of West Berbice is chosen since it had in 1970 the highest proportion of 32% of Africans compared to other areas. (See Table in Appendix. If it is found that West Berbice had the highest rate of out-migration, then it can reasonably be assumed that that was so because it had a high proportion of Africans.) In 1970 the census recorded the total of 10,824 persons out-migrating from this area, with 5,769 or 53% of the migrants proceeding to urban areas. In terms of the ethnicity of the migrants, a total of 4,030 or 70% were of African descent. Thus proportionally, while the African group was only 32% or approximately one third of the population it comprised 70% or more than two-thirds of the rural-to-urban migrants. East Indians, who comprised more than 60% of the total population, accounted for only 21% of urban-ward migration. Thus clearly, the African component of the population of West Berbice, and indeed of all rural areas, had a high rate of rural-urban migration.¹²

While Africans tended to dominate in the rural-to-urban flows East Indians tended to do the same in the rural-to-rural streams. Taking

West Berbice again as an example, East Indians in 1970 comprised 63% of the total population and accounted for 60% of the out-migrants who had rural destinations. Thus, the original deduction that members of one ethnic group will tend to flow from an area to another where members of that group were the dominant group is valid. As a group, Africans tend to have a higher rate of movement to urban areas where they were the most populous group, while the converse is true for the East Indians.

(iv) Migrants by Education Attained

The educational status of migrants is analysed according to their place of residence in 1970 (see Table 9 in Appendix). The majority of rural and urban out-migrants seemed to have only basic primary education. However, those proceeding to urban places seemed to be more educated (in terms of formal education attained) than those proceeding to rural destinations. Slightly over two-thirds of the migrants to urban places had primary schooling as their highest level attained while three-quarters of those moving to rural areas had the same level. Urban areas, as expected, received a higher proportion of migrants with secondary education (22%) than rural areas (8.6%). More striking was that 58% of all migrants who had secondary education moved to Georgetown and the suburbs, and 69% of all migrants who had University education had the same destination. Thus the hypothesis 4(1), which states that a greater proportion of the migrants with higher education will proceed to urban areas, is valid.

To see how migrants to urban areas compare, educationally, with the resident population, migrants to the City and Suburbs of Georgetown are analysed (see Table 10 in Appendix).

Comparing urban migrants with the resident population in terms of level of education attained, it can be seen from the above mentioned table that more migrants only had primary education. The destination population (i.e. Georgetown and Suburbs) had a higher proportion of persons having secondary and University education. Thus rural-urban migrants were less educated than their urban counterparts, which lends support to hypothesis 4(ii) stated earlier.¹³

(v) Migrants by Occupational Status

The occupational status of migrants is analysed in terms of their occupation at place of destination by major areas (see Table 12 in Appendix).

Migrants to urban areas seemed to be well represented in the relatively high and medium-paying occupations. If clerical and related occupations can be considered as reasonably high paying in relation to others, then between 23% and 37% of migrants in urban areas can be said to be in high-income occupations. (This proportion of migrants in relatively high-income occupations seems to be inordinately high compared to migrants in other Developing Countries, and seems to be so mainly because of the favourable economic position that educated individuals were able to attain, prior to 1970. Because of this a large number of persons aspired to secondary education and later came to Georgetown where suitable employment was most likely to be found. There they experienced a high degree of occupational mobility.)¹⁴

Further, if public sector service workers can be considered as, more or less, medium income employment, then a total of 72% of migrants to Greater Georgetown were in high and medium paying jobs. Approximately another 20% of migrants were in production and related occupations in which incomes depended on the specific circumstances, and less than 7% were in really low-income jobs such as labourers etc.¹⁵

Considering the agrarian nature of rural areas a somewhat high proportion of the rural-to-rural migrants moved to high paid jobs, which may be explained by reasons of job transfers of those employed in the rural services. However, as expected, the majority of 55.5% of migrants with rural destinations moved to employment in farm and related activities. Thus migrants to urban areas, despite their lower average educational attainment than destination populations, were not marginalised in a sense that they predominated in low income or poorly paid jobs; on the contrary, compared to those moving to other rural areas, those to urban areas moved to relatively well paid jobs.

(vi) Migrants by Mobility (Number of Moves Made) and Distance Travelled

The number of moves made by migrants to place of residence in 1970 is analysed to show the degree of migrants' geographic mobility.

Approximately 80% of all migrants were found to have made only one move from the place of their birth to the place of residence in which they were enumerated (see Table 12 in Appendix). However, those moving to Georgetown had a slightly higher mobility in that 19% made two moves compared to 14% making the same number of moves but going to rural areas. A relatively small proportion made more than two moves. Most of those finally moved to urban places or to interior regions of the country.

To give an indication of place of origin of migrants, in terms of distance travelled, those arriving at Georgetown and the Suburbs are analysed.

The data presented in Table 12 mentioned above generally seems to support the early postulate of Ravenstein which states that the majority of migrants proceed a short distance only. The migration data observed from the census reports show that 47% of migrants to Georgetown have originated from less than 40 miles 18% came from the medium distance of between 40-70 miles while 35% travelled over 70 miles. In terms of a ratio of movers to non-movers the pattern of movement was more or less expected, and in relation to the size of origin populations and distance located from Georgetown. An average of 99 out of every 1000 persons in the region less than 40 miles from Georgetown moved to it. The comparative rate for medium and long distance movers was 109 and 69 per thousand respectively. Thus Ravenstein's short-moves hypothesis was not borne out for medium range migrants.¹⁶

Two possible reasons can be cited for this. One is that Georgetown's influence was inordinately strong in the outlying regions of East Demerara, Essequibo Coast and West Berbice. Since it was difficult to commute long distances to and from the city it was most likely that this to a great extent influenced the migration decision, i.e. to move to the city. Another reason might be that there had been some under enumeration of migrants in the city who originated from nearby districts. Since many children in the

East and West Coasts and East Bank districts would have been born in the Georgetown district they would not be considered as migrants to the city when, in fact, they were. Thus, persons from medium-distance, i.e. 40-70 miles from Georgetown, were shown to have a higher rate of in-migration to the city than those from nearby.

Hence, in summary, migrants to urban areas (mainly to Georgetown) were young individuals in the ages of 15 to 40 years. As in most Latin American countries, females tended to have a slightly higher tendency than males to migrate. Africans were more mobile than East Indians with most of them moving to urban locations. Education seemed to be a strong variable in the decision to move. Due, in part, to the urban-rural disparity in educational facilities, migrants to Georgetown were less educated than the city population, taking both groups as an average. But despite this fact they were not marginalised, in a sense that they occupied mainly low-income jobs. And finally, migrants were not as mobile (geographically) as is the opinion of some observers.

4. Causes of Internal Migration in Guyana

In the absence of necessary information it is not possible to present the specific causes of migration, as such; rather, with the help of relevant published and unpublished material and primary sources of information the broad causes are outlined.¹⁷ The causes are analysed mainly with respect to the rural-urban flows since those were the dominant flows and thus the most important. Reference is made to other flows whenever such is relevant.

As previously stated, migration has been observed to occur in response to a set of factors in a special combination. Usually, the factors are of different weights. Each, or each set, exerts influence on the decision to move and choice of destination in accordance with their specific weighting. The view is taken here that in Guyana economic motives were principal in the decision to move process.¹⁸ This, however, does not imply that economic

motives existed in isolation, or that such motives alone accounted for rural-urban and other migration in the country. It was complemented by relevant groups of social and psychological factors which in themselves were not powerful enough to determine the final decision, but nevertheless exerted considerable influence in shaping the decision and the consequent action. The following exposition attempts to show the causative factors and the social and economic background under which they operated to create migrant motivations among sections of the rural population which eventually resulted in their out-migration.

Broadly, the principal causes of rural out-migration in Guyana were rural population growth and rural underdevelopment. While very little could have been done to affect the former (it should be recalled from Chapter 2 that since the end of the Second World War the population of the country entered its most fertile demographic phase) much could have been done to improve the rural conditions of life and making rural areas attractive to living and thereby to retain its population. Because this was not done the two conditions combined to result in high rates of out-migration from rural areas. The result in 1970 was that migrants from rural areas comprised nearly a third of the entire urban population. In a more explicit analysis of why this was so the relevant institutional, economic, social and psychological and other factors of rural underdevelopment are presented below. Each of the factors is analysed separately.

(i) Institutional factors

Foremost among the factors here was why, in the first instance, rural underdevelopment or low development relative to urban, was permitted when it was that the sugar production, which was the economy's chief source of wealth, by necessity, was located in rural areas. The answer to this lies in the fact that the primary objective of the Sugar Planters was to obtain the highest returns at the lowest possible cost. The Colony's Administration, seated in the city, tended to protect the interests of Sugar Planters and the land owning and elite classes and so did very little to alleviate the deplorable

living conditions in rural areas. In fact their rural interest was a little more than casual, which was reflected in their post-war attempts to reduce the effects of rural poverty and decay.¹⁹

As was seen in a previous section on Post War Planning Developments, there were no attempts at 'integrated planning' before 1966. The planning that was done was that investments were made on coastal projects that had the potentials of highest immediate returns.²⁰ As such, the investments were not in accordance with an overall framework and the result was that it helped to increase the inequality between the progressing and the stagnated areas. There was no attempt at diversification of agriculture, the country's main rural activity; rather, an increase in the rice and sugar acreages during this period accentuated the concentration of agricultural activity to these two crops, while the country had to import most of its food. The irony of the situation was that this situation was allowed to develop when both land and labour in the country were surplus commodities.²¹ Also, there were few attempts to diversify the employment base of the rural population in terms of providing an impetus for creating a climate for the development of some agriculture or related industrial development. Thus the rural labour force had the limited options of entering into agricultural employment as small farmers, or to try to obtain estate employment as wage labourers, or to remain underemployed or unemployed in areas of growing impoverishment.

(ii) Economic factors

Rural underdevelopment to which rural out-migration is attributed was due to a number of reasons other than Administration biases and lack of planning foresight. Foremost among these 'other' reasons were economic reasons which finally determined whether the individual would migrate or not and the place of destination if migration did take place. Most of the economic reasons discussed here are concerned with the nature and causes of rural underdevelopment in the country prior to 1970.

Firstly, rural underdevelopment was, to a great extent, due to the inability of peasant agriculture to provide for the wants of practising farmers

and their dependents. This inability, in itself, was due to a number of factors the foremost of which was the availability of land - the basis of all agriculture. Ever since the days of emancipation and the earliest rise of peasantry in the country land was in short supply. Given the size of the farming population and the amount of land available and suitable for agriculture it was ludicrous that peasants and small farmers should be faced with a continual shortage of land in the country. Yet that was (and until now is) the situation.

In 1970 there were an estimated 25,000 farmers in the country occupying 784,000 acres.²² The average size of holdings, if the land was to be shared equally, would be approximately 31 acres per farmer, but the actual holdings of farmers vary immensely. Small sized farms predominated. 50% of all farms were under 15 acres, and occupied less than one quarter of the total acreage cultivated. The 'bottom end' of the land distribution spectrum was even more remarkable. A mere 4.2% of land holdings were in large farms but these accounted for 60% of the total land available. Until this point in time very little real attempts were made to redress this unequal distribution. The State, pursuing a policy aimed at preventing the alienation of State lands and fragmentation of cultivated plots, has made it extremely difficult for small farmers to obtain unoccupied and unused State lands while it is relatively easy for large operators to do so. As a result relatively large farmers or influential (and wealthy) individuals manage to obtain large parcels of land at 'pepper-corn' rents. These then sublet parcels to small 'land-hungry' farmers at high rents. Thus while attempting to prevent land fragmentation, the State had actually accelerated it and so contributed to the growing gap between large landowners and poor rural peasants in the process.²³

In addition to the shortage of land, a number of outstanding handicaps have served to make agriculture, especially rice-farming, which was done by the great majority of farmers, to be very unprofitable.²⁴ Since the early sixties mechanisation was introduced in the industry with a number of implications. Nearly all farmers had the heavy work of land preparation and harvesting done by tractors and combine harvesters. Thus by mechanising,

much of the back-breaking toil was removed but it also had some disadvantages. Machine costs were high, which resulted in ownership being limited to the larger farmers and, as such, resulted in the smaller farmers depending on them for machine hire. Mechanisation also resulted in declining yields as Table 24 in the Appendix shows. Production in the 1960-70 decade was only maintained by increasing the acreage under cultivation. Also, while mechanisation made life easy for the farmer, it eroded the quality of his husbandry. Good husbandry, in terms of intensive cropping at high yields, was traded for extensive cropping at low productivity per acre which resulted in low profits and hence had serious implications on the viability of rice farming as an economic activity. Further, it eventually resulted in many small farmers giving up farming for alternative sources of livelihood. Since there were few alternatives in rural areas it is reasonable to imply that many took the more promising option of migrating to urban areas where the probability of employment seemed greatest.

The most significant effect mechanisation had on rice farming was that it made redundant four fifths of the labour formerly required on rice farms. It is estimated that the tractor and the combine harvester have reduced labour inputs on a 15 acre farm by at least 110 man days per crop, or by approximately 80% of the time needed to do the same jobs by traditional methods. Thus, mechanisation contributed to underemployment of the farmer and made redundant the casual labour in rural areas who depended on the seasonal (harvest and planting) employment.²⁵ In view of the relative permanence of mechanisation in agriculture it is rational to assume that all those among the displaced persons who could move did so to areas of employment and better opportunity, i.e. to urban areas. Hence rural out-migration was a direct result of farm mechanisation.

Apart from the ill-effects of mechanisation, a number of other factors undermined the ability of farmers, particularly small farmers, to remain in agriculture, and hence in rural areas. For a significant proportion of these farmers the 'quasi-feudal relations' of production in agriculture in some areas have been the reason for rapid out-migration.²⁶ Many large landowners

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i.e. in Essequibo county, have living on their land peasants who during the 1950's supplied labour and paid token rents for the 'usufruct' of small plots but who, during the 1960's, were forced to pay exorbitant rents for land which they had farmed for a number of years. The alternative to this was that they could terminate their tenancies. Thus while, formerly, only the 'prepared' adult left the village for employment in Georgetown or in bauxite mining areas entire households were forced to out-migrate.

On the whole rice farming, which was in 1968 estimated to be the basis of livelihood for 48,000 families, or involved approximately 60% of the total rural population, was beleaguered with innumerable problems, risks and difficulties which the poor incapacitated farmers were unable to overcome. Profits, after the 1963-64 period when rice prices paid by the monopsonist (Government) buyer were not related to costs, declined sharply. While large and medium sized farmers responded to this market situation by increasing their farms or by double cropping the smaller farmers could do little. Large farmers also intensified their mechanical operations and so employed fewer of the rural unemployed.

Even in the well planned and Government controlled Land Development Schemes productivity and yields declined enormously due to Government failure to resolve outstanding bottlenecks to production. The assumed rice profits of G\$ 103 per acre cultivated or an income of G\$ 1552 per year in 1961 declined to G\$ 20 if wages for his labour was to be deducted from total costs.²⁷ Thus, in the best of circumstances, rice farming for which the entire rural population and infrastructure etc. was geared, was unprofitable. As an economic activity it was inadequate to supply the basic wants of the farming population. In view of this, it would be quite rational to propose that farmers here should have turned to mixed cropping and other forms of agriculture. But this was hardly feasible since, apart from domestic need, there were no marketing arrangements for the relatively more perishable commodities. The lack of transportation was the single most important factor disallowing such developments.²⁸

Many farmers tried to supplement their failing farm incomes by

engaging in part or full time wage-employment outwith the farms. While negro farmers had an easier access to public works jobs, East Indians sought employment as labourers on the sugar estates. But there was a limit to the amount of (manual) labour the estates could absorb. Since the early fifties they too had embarked on a policy of more or less full mechanisation. As such, there was no longer a need for a large workforce. In fact the labour employed declined even when the acreage under sugar and the amount of sugar produced increased.²⁹

Employment in the bauxite industry, which was the traditional source of employment for a large number of African migrant workers, did not increase significantly in the 1955-70 period. The reason was that the industry was very mechanised. Actual numbers employed remained around 5,500 over the years with the result that many in the mining areas had to subsist on secondary and other employment.³⁰ Thus the unsatisfactory returns from agriculture and declining employment opportunities in both sugar and bauxite industries resulted in a mass of rural persons seeking employment away from rural areas. While many were able to migrate overseas a great many proceeded towards the urban areas, mainly Georgetown and its suburban districts where employment prospects were brighter.

(iii) Social Factors

While employment opportunities or the probability of obtaining employment at destination seems to have been the most significant reason for migrating a number of subsidiary considerations have exerted a very strong influence on the decision to move to urban areas. The most important of these was the poor rural living conditions with a dim view in the migrant's perspective of improvement in the near future. The level of services, which determine the level of satisfaction or dissatisfaction of rural living, was deplorable compared to that in urban areas. Some areas did not even have the most basic of services³¹. Prior to 1972 all the Plans and Development Programmes paid scant attention to housing, even with the knowledge of the post-war population growth the country was experiencing.³² As a result,

housing was continually in chronic short-supply.³³ Overcrowding was rife.³⁴ The 1960 and 1970 censuses showed that the majority of rural houses, in which the principal material of construction was wood, were old and in need of repairs.³⁵

Other services were equally poor and deficient. Health services were especially poor. Although there were 14 regional hospitals in rural areas until the mid sixties these catered primarily for the needs of the Sugar Estates for whose welfare many were originally set up. A number of health centres were established in the early sixties but these were woefully undermanned and suffered from a perpetual shortage of trained staff and medical supplies. Facilities for secondary education were acutely lacking.³⁶ Sanitation and rural hygiene were either non-existent in many areas or very poor where present. Basic utilities, i.e. water supply and electricity, were available only in selected areas. Transport was the most debilitating of rural handicaps. Most areas lacked adequate commercial and other facilities. Extensive travel had to be undertaken for whatever shopping, marketing, banking activities, etc. that were needed.

(iv) Psychological Reasons

It is widely believed that among sections of the rural population, i.e. in the African community and the relatively wealthier East Indian group, there was a response to the pull of the 'bright lights of the City'. (In this context 'bright lights' is taken to mean that in the city there are avenues, e.g. social gatherings, dances etc., in which to spend one's earnings and to have a 'good time' in doing so. Also 'bright lights' is taken to mean that urban living gives prestige to the individual or family to those remaining at the place of origin with which the migrant maintains strong links.) In this sense there was a psychological-behavioural pull to Georgetown, but it is highly unlikely that this factor alone caused urban migration among those most likely to respond to it. The fact that many more Africans left the rural areas for urban was (as previously explained) due to their lesser involvement in rural agriculture, their long established urban links, and the expectation of

help upon arrival in the city. While such help minimises the difficulties of moving and adjustment etc., it was not long lasting. If, hypothetically, there were no or few chances of being employed then the return migration would have been higher. But since it was negligible it can be assumed that it was not really 'bright lights' that pulled rural persons to urban areas but the more tangible chances of finding employment. However, the city 'bright lights' may have helped to induce migration, but did not alone cause rural-urban migration³⁷.

(v) Other Factors

There has been little decentralisation of employment activities from Georgetown. Over the years the Government machinery expanded substantially, providing 'white-collar' and other non-labouring jobs, which resulted in a tremendous 'pull' on rural persons of some education or 'other' qualifications to move to Georgetown. Complementing the rise of urban white collar employment was the disproportionate allocation of housing expenditure in favour of urban areas. In terms of wages and prices real urban incomes were significantly higher than rural. Most urban workers were members of active trade unions while no such organisations existed in rural areas except in the sugar industry.

Thus, in review, land scarcity, fragmentation, mechanisation, declining profits in rice farming, and a contracting workforce in the sugar and bauxite industries relative to output, have contributed to rural out-migration. Other factors include the low level of development in rural areas, and the poor quality or non-existence of many basic services.

5. Period of Entry of Migrants

Since migrants dealt with here are internal migrants, period of entry in one population district also means period of departure from another. The intermediary moves are not taken into account. Place of birth is assumed

to be the migrant's place of origin.

Despite the long history of black and brown mobility in Guyana there is substantial evidence to show that the recent rate of mobility and volume of movement have exceeded that of any former period. Also, in view of increasing rural awareness, rising expectations and the lack of rural opportunities, the direction of movement has been heavily biased towards urban areas, the principal of which is Georgetown. In the absence of specific data it is here attempted to verify the above by various direct and indirect means.

The data on the period of entry of migrants to the usual place of residence in 1970 indicated that the majority of moves were of very recent occurrence (see Table 7 in Appendix). All areas received an average of 61.5% of their total in-migrants during the 1960-70 inter-censal period. Compared to this volume, the movement occurring during the preceding 1946-60 14 year inter-censal period seems small, and the total movement prior to 1946 insignificant. However, the volume of migration during any period was related to the size of the origin populations of that period and as such, by itself, did not indicate the rate of movement. A good indication of the rate of mobility within a period can be obtained by comparing the ratio of movers to non-movers within that period, and by examining that ratio with population increases within that period.

According to the census of 1946 there were only 24,229 migrants (movers) in the entire population, or only one in every 15 persons were not living at the place of his/her birth. During the 1946-60 census period the ratio of movers to non-movers increased to one in every seven persons being a migrant, and in the 1960-70 (10 year) period the mover to non-mover ratio further increased to become one in every three persons in the country not residing at the place of his/her birth. This geometric increase in the proportion of movers to non-movers is indicative of the increasing rate of post-war mobility in the country.³⁸

To show that the increase in mobility was not mainly a result of population increases, additions to the population are discussed in relation to the migrant

increases within the 1946-70 period. During the 1947-60 period the population increased by 51%, and the corresponding increase in mobility was 123% over what it was in 1947. In the following 1960-70 census period the total population increased by only 25% but the number of migrations (on the basis of one move per person) increased by 132%, which is a clear indication that the rate of mobility was higher than population increases.³⁹

In terms of destination of migrants the census data does not show an increasing trend in the proportion of movers to urban areas, as the prevailing social and economic conditions in the country would seem to suggest. Prior to 1947, movement to Georgetown accounted for 39% of all movement within the country. In 1960 this proportion was reduced to 23.7% and remained around this level in 1970 (23%). This seemingly substantial reduction in the proportion of migrations to Georgetown can be explained by two factors. One is inter-area movement, i.e. between rural areas, which had increased significantly over the period, and areas adjacent to Georgetown, i.e. East Bank Demerara, had become high in-migration areas. Nevertheless, despite its proportional decline as destination of migrants, Georgetown increased its attractiveness to migrants; as, clearly, most of those who moved to its three suburban districts moved indirectly to Georgetown, but because of housing etc. located themselves in the peripheral areas of the East and West Coasts and the East Bank of Demerara. Thus geographically, as taken by the census, these migrants moving to the above three areas were regarded as migrants to those areas and not to Georgetown which was the real destination of the migrants.

The assertion made earlier that the population of Guyana was becoming increasingly mobile seemed to be fully justified from evidence presented in Table 8 in the Appendix. Reviewing this Table it will be seen that, on average, all areas received more than half of their total migrant population within the short period of ten years, i.e. between 1960 and 1970. Georgetown received 63.5% of its migrant population within this period, while the towns of Linden and New Amsterdam received 63.3% and 54.9% respectively. It cannot be said that the above migrant increases were due directly to

population increases. During the entire decade the population increased only by (approximately) 25% while migrant increases in urban and rural populations were, on average, over 60%. Thus clearly, the rate of population mobility was significantly higher than population increases. This pattern seems to have been the trend throughout the decade. Table 8 shows that in fact the rate of urban migration has risen dramatically towards the last years of the 1960-70 decade. During the last 15 months urban areas, on average, received more than a third of their total migrants, which is cause for serious alarm.⁴⁰

However, the above rate of increase seems statistically unfounded and seems to be due to data imperfections. This could have arisen from the respondents' erroneous interpretation of the census question. But nevertheless, the rate of urban migration seems to have been increasing throughout the decade.

6. The Patterns of Migration

This section, using census and other relevant data, analyses the patterns of internal migration in Guyana. A knowledge of the spatial and temporal variations of the settlement pattern, the characteristics and orientation of the labour force, and a knowledge of the structure and functioning of the Guyanese economy, allows one to make a number of hypothetical deductions as to the patterns of population mobility in the country. The following are some of these deductions.

Hypothesis one: Since Georgetown was by far the largest city and since it was most likely to have greater employment opportunities than elsewhere, most of the rural-urban flows would have been directed towards it.

Hypothesis two: For the same reason, as above, it was also the main destination of inter-urban migrants.

Hypothesis three: Since rural areas had few employment opportunities and generally poor services, return migration (from Georgetown) was negligible.

Hypothesis four: Because the predominant agricultural areas had limited employment opportunities, and because a great many persons were not prepared to enter into agricultural employment, the rate of net migration from these areas was likely to have been the highest in the country.

Hypothesis five: Since it is well known that Africans are generally more mobile than East Indians, rural areas having a high proportion of Africans would have high rates of net out-migration irrespective of whether the rural base was agricultural or not.

Hypothesis one

Since migration in Guyana was said to occur mainly in response to better economic and other opportunities it is obvious that such movement would be directed to or towards those centres where employment and other opportunities were greatest. Hence it was towards urban areas, mainly Georgetown, where such conditions were seen to prevail. A number of factors tended to

lead to creating such a situation. Georgetown was centrally located along the coast. One half of the country's entire population was located in it and within the distance of thirty miles from it.⁴¹ As previously mentioned, it was the chief port and centre of commercial and industrial activity in the country. As such it had nearly 80% of the total non-agricultural jobs that were available. Thus to potential migrants it was perfectly rational that they should move to Georgetown instead of other destinations. The Table below shows the extent of the preference for Georgetown as a migrant destination.

TABLE 11 Comparing Rural-Urban Migration to Georgetown with the Next Most Popular Destination 1970

| Area of Origin | Destination of Migrants % | | Place of Next Destination |
|---------------------|---------------------------|--------------|---------------------------|
| | Georgetown | Next Popular | |
| East Bank Demerara | 40.1 | 19.8 | West Demerara |
| East Coast Demerara | 45.3 | 10.9 | West Demerara |
| West Demerara | 42.8 | 15.9 | East Bank Demerara |
| Essequibo Coast | 44.0 | 18.6 | West Demerara |
| West Berbice | 25.6 | 22.0 | Rest Berbice |
| Rest Berbice | 35.0 | 22.3 | New Amsterdam |
| Interior Districts | 52.2 | 14.6 | Essequibo Coast |
| (Average) | (40.7) | (17.7) | |

Source: Population Census 1970, Vol. 5.

An average of 40% of the total out-migrants from rural areas moved directly to Georgetown, which was nearly two and a half times more than those proceeding to the next population destination. On average, the proportion of migrants from the three rurban districts was only slightly more than that from the more distantly located rural areas. The most plausible reasons why migration from the three rurban areas was not more evident were that

the acute housing shortage in the city and relative ease of commuting might have deferred migration. But however, migration to the city of Georgetown per se was not the true indication of rural out-migration to it since it was strictly defined by geographical boundaries. A closer observation of Table 11 shows that four of the seven areas presented have either of the adjacent areas to Georgetown as the second most popular destination. (Even the three areas (see Table) that did not readily fit into the pattern where a rural area was the second most important destination had approximately one fifth of their out-migration directed to the three rural areas near the city.) For reasons similar to that mentioned above, the migrations to the East Coast, East Bank and West Demerara were, in fact, migrations to Georgetown, and are here considered to be so. With this view the Table 12 below gives a truer approximation of the attraction of Georgetown as a migrant destination.

TABLE 12 Showing Migrants to Georgetown and its Environs by Place of Origin of Migrants 1970

| Place of Origin | Proportion Moving to Georgetown and Environs |
|---------------------|--|
| East Bank Demerara | 75.5 |
| East Coast Demerara | 66.4 |
| West Demerara | 69.5 |
| West Berbice | 47.1 |
| Rest Berbice | 55.1 |
| Essequibo Coast | 76.8 |
| Interior Districts | 71.2 |
| Average | 66.0 |

Source: Calculated from the Population Census 1970, Vol. 5.

Thus, on average, approximately two-thirds of the total rural out-migration proceeded to Georgetown alone. Hence, the hypothesis that because Georgetown

had the greatest employment opportunities it would be the main destination of migrants seems valid.

Hypothesis two

Approximately 45% and 48% of the out-migration from Linden town and New Amsterdam respectively moved directly to the city of Georgetown. In each case this proportion was more than twice that moving to the next main destination. If, however, the true migration to Georgetown is observed then a total of 82% of the migrants from Linden and 60% from New Amsterdam had Georgetown as their destination. Thus migrants from urban areas too were strongly attracted to Georgetown.

Hypothesis three

In rural Guyana employment opportunities were limited to rice or vegetable farming for those fortunate enough to own land, or to employment as casual farm labourers, or sugar estate workers. In the event of migrating to areas of greater economic (employment) opportunities migrants, knowing their limited rural prospects, make a determined effort to do well. In this they might receive help from previous migrants or members of 'family' etc. Thus migrants rarely returned to their place of origin for reasons of failing to adjust and improve their economic position above that prior to their departure. Even when migrants have done reasonably well, given their skills and capabilities, they tend to remain in Georgetown for the reason that their rural origin areas remain relatively undeveloped. Over the years they tend to acquire a taste for urban living, the benefit of superior urban utilities such as piped water, electricity etc., and such services as housing, public health, transport etc. which are absent or very poorly developed in rural areas. Thus, from all areas excepting East Bank, shown in the Table below, rural out-migration to urban areas, and to Georgetown in particular, exceeded return migration by between 60% and 80%.

TABLE 13 **Rural Out and Return Migration To (and From) Georgetown 1970**

| Rural Areas incl. Rurban | Out-Migrants Proceeding to Georgetown | Return Migration | Net Loss/Gain to Area | |
|-----------------------------|---|---------------------|-----------------------|------|
| | | | No. | % |
| East Bank Demerara | 2527 | 2045 | 1498 | 59 |
| East Coast Demerara | 11845 | 5510 | - 6335 | - 54 |
| West Demerara | 7658 | 2698 | - 4960 | - 65 |
| West Berbice | 2761 | 469 | - 2298 | - 83 |
| Rest Berbice | 5883 | 1359 | - 4524 | - 77 |
| Essequibo Coast | 1561 | 963 | - 6598 | - 87 |
| Interior Districts | 2797 | 600 | - 2197 | - 79 |

Source: Population Census 1970, Vol. 5.

Observing the Table closely it will be seen that the areas located more than 40 miles from Georgetown, i.e. West and Rest of Berbice, Essequibo Coast and Interior Districts, experienced high net losses. For every one migrant returning four did not. This was more or less expected since, compared to Georgetown or even the relatively more developed rurban areas, these areas had the least developed services and fewest employment opportunities outside agriculture. The more developed rural areas near to Georgetown, having slightly better services and avenues of employment, had a lower net outflow. For every ten persons out-migrating as many as four returned, which signifies a somewhat substantial return flow.

However, there is strong reason to suggest that, on the contrary, the return flow was small - much less than that indicated by the Census. Since migrants were defined as persons not residing at their area of birth it was likely that babies etc., originating in the rurban areas but born in hospitals which were geographically located in Georgetown, were counted as migrants to their usual place of residence. Thus, the volume of migrants returning from Georgetown was much lower than that shown in Table 13. Hence, on the whole, because of limited employment opportunities and poor services,

return migration from Georgetown and similarly from the other two urban areas was small, which lends support to the previously stated Hypothesis three.

Hypothesis four

The slow pace of rural development has been a lamentable problem in Guyana. Until the end of the Second World War very few attempts were made to accelerate the development of rural areas. It was the domicile of the majority of the country's population who lived by cultivating rice and vegetables or worked on sugar estates. Because rural fertility, in terms of live births per number of persons, was higher than in urban or rural areas, and because the rate of mortality was the same throughout the country, rural areas had a higher rate of population increase than the average rate of the country.⁴² As a result of this high rate of increase, occurring more or less throughout the 1950's and 1960's, pressure on the available land and other resources was greatly increased. The need for land that was already in short supply became acute. Its very uneven distribution served to seriously aggravate the shortage, which gave rise to practices such as fragmentation and landlordism. Whatever farm employment that was available, labour saving innovations such as mechanisation and others were instrumental in reducing. Low profits in rice farming had served to deter enthusiasm for expansion and enfeebled the industry, making diversification and job creation activities impracticable. Thus, in the face of rising population there was a reduction of employment available and a lack of employment creation activities.

In such a situation it was imperative for population entering the labour force and those made redundant to migrate to areas of better opportunity. Hence since dominant agricultural areas had fewer jobs and greater population increases it was logical that the net rate of out-migration (a function of in- and out-migration) would be higher than in the mixed activity rural areas where more employment opportunities were available.

Also, the flow of information on urban wages, the attractive conditions of work and the relative superiority of urban services and facilities compared to rural had the effect of creating 'white collar' attitudes among the rural work force.⁴³ As part of it was that there grew a general disdain for agricultural work by all those who had average or higher than average education.⁴⁴ Hence, the unwillingness to accept farming employment even when this was available.⁴⁵ Because alternative employment opportunities were not usually available this group then out-migrated in an effort to improve their dim rural prospects. Thus, as the Table below shows, the net out-migration was highest from the predominant agricultural areas.

TABLE 14 Net Out-Migration from Rural Areas Ranked by Proportion of Population Involved in Agriculture 1970

| Rural Areas | Net Out-Migration (per 1000 population) |
|-----------------------------|---|
| Essequibo Coast and Islands | - 154 |
| West Berbice | - 145 |
| Rest Berbice | - 44 |
| West Demerara | - 56 |
| East Coast Demerara | - 87 |
| East Bank Demerara | + 155 |

Source: Calculated from Population Census 1970, Vol. 5.

From the Table above it will be seen that in Essequibo Coast and West Berbice where agriculture ranked foremost as the principal activity, the rate of net out-migration was highest. In these areas approximately 70-80% of the labour force (i.e. those in employment) were engaged either directly or indirectly in agriculture. Alternative employment was limited to a few service and 'public works' jobs in the areas.⁴⁶ The substantially low net rate of only 44/1000 persons out-migrating from Rest of Berbice can be explained by the fact that it was the furthest coastal district from Georgetown, and that it had greater employment opportunities than either Essequibo or

West Berbice. Three large sugar estates and a bauxite processing plant located within the area provided alternative non-farm employment for a substantial proportion of the population. Large numbers from its Corentyne district migrate periodically (seasonally) to the rice, sugar and banana plantations in neighbouring Surinam.⁴⁷ Also, in its agriculture, land seems to be slightly more evenly distributed. A higher proportion of farms were economic sized holdings for rice cultivation which was the main crop. Thus a smaller proportion of farmers were prepared to migrate for wage employment to supplement low farm incomes. And generally, a greater proportion of those who were not keen on agricultural employment found alternative jobs and so remained in the area. Hence the lower rate of net out-migration.

In the rural districts (see Table 14) the lower rate of West Demerara and higher rate of East Coast of Demerara can be explained by the following. First, the proportion of negroes, who will be shown later to be generally more migratory, was lower in West Demerara's population. (See Table 5 in Appendix.) Secondly, a substantial number of the East Indians in West Demerara were employed in the area's four sugar estates. East Coast with a 30% greater population only had two such estates.⁴⁸ Thirdly, during the 1950's and 1960's proportionally more of the population along the East Coast had easier access to the city.⁴⁹ Hence along the East Coast more of the population were Africans, fewer employment opportunities were available and access to the city of Georgetown was easier.

The high rate of net in-migration to East Bank of Demerara seems to be due to three factors. One was that it was a region of high in-migration (see Table 14 in Appendix). Another was that commuting to the city for employment etc was quite extensive, and finally it was the most industrialised of the rural or rural areas. Thus, proportionally, it had the greatest amount of non-farm employment to retain its population or to delay their out-migration.⁵⁰

Thus, in review, rural areas where agriculture was the main occupation

and alternative employment opportunities least, as in West Berbice and Essequibo Coast, the rate of net out-migration was highest. In Rest of Berbice, although having agriculture as the main occupation, the majority of the population had reasonable employment opportunities outside of farming. In the rural districts, West Demerara had a greater proportion involved in agriculture, but the nearness of Georgetown and alternative employment opportunities within the area have resulted in it having lower rates of net out-migration than on the East Coast of Demerara, where the areas where agriculture was practised were similar to those on the Coast of Essequibo and in West Berbice. East Bank Demerara had fewest involved in agriculture and the greatest proportion (taking rural and rural areas) of non-farming occupations, and hence it was an in-migration area instead of an out. Thus Hypothesis four, stated earlier, seems to be valid to some extent. Two of the three principal agricultural areas had high rates of net out-migration. But however, in Rest of Berbice and in West Demerara, where alternative opportunities to farming were available, the hypothesis tended to be weak.

Hypothesis five

The rate of out-migration from rural areas has been observed to be determined by the characteristics of the potential migrants. It is also the widespread belief that Africans have a higher propensity to migrate to urban and other areas. To test the validity of this statement the proportion of Africans in rural areas and their (rural areas) rates of gross out-migration are examined. Presented in the Table below are the rates of gross out-migration from rural areas ranked by the proportion of population of Africans in their population.

TABLE 15 Rates of Gross Out-Migration from Rural Areas Ranked by
Proportion of Africans in the Population 1970

| Area | % Africans in Population | Gross Rate of Out-Migration per 1000 population |
|---------------------|-----------------------------|--|
| West Berbice | 32 | 275 |
| East Coast Demerara | 30 | 219 |
| East Bank Demerara | 28 | 220 |
| West Demerara | 22 | 216 |
| Essequibo Coast | 21 | 251 |
| Interior Districts | 15 | 136 |
| Rest Berbice | 13 | 122 |

Source: Calculated from Population Census 1970, Vol. 5.

As the Table clearly shows, except in the case of Essequibo Coast the rate of out-migration seems related to the proportion of Africans in the population and unrelated to the degree of agricultural activity in the out-migrating areas. West Berbice, with the highest proportion of Africans and having a predominant agricultural base (in which between 70% and 80% earn their livelihood from agriculture), had the highest rate of out-migration. At the other end of the regional distribution of Africans, Interior Districts and Rest of Berbice, having the same agricultural base as West Berbice but a much lower proportion (14%) of Africans in their populations, had a rate of out-migration that was lower than that of West Berbice by nearly 51% and 56% respectively. The rural areas where economic activity was mixed had a slightly lower proportion of Africans in their populations and as such had lower rates of out-migration than West Berbice.

Thus Hypothesis five seems to be valid. Irrespective of the economic base of rural and rural areas those areas with a high proportion of Africans in their population experienced high rates of out-migration. The reason for this has to do with the fact that, on the whole, Africans tend to be disinclined towards farming as a means of livelihood. Few owned economic parcels of

land to enter into rice farming.⁵¹ Rather they tended to prefer to seek employment in the Social Services, public works or related fields. Where such jobs were limited, as in the case of West Berbice, out-migration was high. In conclusion, areas in which Africans constitute a high proportion of the population experienced a high rate of out-migration.

7. Implications of the Rate and Pattern of Rural-Urban Migration in Guyana

Rural-urban migration may have a number of very desirable effects on both the receiving and sending areas. But, depending on the rate and pattern and other specific conditions under which it operates, it may also be the prime reason for disequilibrium and decline in both regions. Generally the range of effects depends on the rate and volume of out and in-migration. In Guyana the rate and volume of rural out-migration as it occurred in the post-war period was thought to have serious implications for rural development, urban conditions and hence for the economy as a whole. At the same time, it had been observed to have some notable advantages for the individuals making the move. The following analysis is intended to outline some of these implications in terms of advantages and disadvantages it conferred on rural and urban regions.

Taking the adverse effects of rural-urban migration on urban areas first, it was noticed that in Guyana, as in a number of Developing Countries, migrants to urban areas were induced by the prospect of employment opportunities along with the expectation of higher wages, relative to that in their rural places of origin. The flows were thus not a response to a demand for labour in urban areas, and were not strictly subjected to the mechanisms of an equilibrium situation where the inflow would subside once the demand was met. Rather, continuing Government programmes of increasing urban employment, and the significantly higher urban wages, led to a continual inflow of rural persons.⁵²

The continuation of this rural-urban flow throughout the 1950's and 1960's had effects inimical to urban employment on the whole. At the beginning of

the 1960-1970 decade unemployment in Georgetown was estimated to be in the vicinity of 30%. By the mid-1960's it had declined somewhat, but by the end of the decade the increasing rapidity of rural-urban migration resulted in levels that were never experienced before. In the following 1970-1980 decade this trend continued, with the result that, during the last years of the 1970's, a realistic approximation would put urban unemployment at between 30% and 40% of the labour force, with juvenile unemployment considerably higher.⁵³

The most prominent causation factor of the above magnitude and rate of increase of urban unemployment was the large flow of migrants from rural areas. The effect of this was that it disrupted the normal labour-market mechanisms of adjusting supply to demand and the processes through which this was done. Together with additions from natural increases, a perpetual surplus of semi-skilled and unskilled labour flooded the urban labour market. While this conferred some advantages to the urban employing sector, it had a number of disadvantages to the native population and to the general urban economy. Taking the latter first, it meant that more of the nation's labour resource was drawn to urban areas where many were, for varying periods, unemployed. During their period of unemployment it was most likely that they had zero or near zero marginal product. Thus, to the national economy, a concentration of a great portion of the labour force in urban areas, where unemployment was high and the period of 'waiting' long, was an inefficient use of one of the country's most valuable resources.

The inflow of relatively qualified persons aspiring to administrative or clerical and related employment resulted in the increasing competition for such employment. The consequence of this was that State expenditure on education facilities had to be increased as individuals were forced to remain longer in schools to improve their qualifications.⁵⁴ An influx of semi-skilled and lower-status manual workers caused unemployment of native workers in those categories to rise. Increased entry into the informal sector resulted in wages for such categories as domestics, etc., to remain relatively static. Generally, in both formal and unregulated sectors, occupations that hitherto experienced a shortage of labour experienced a surplus

which they were unable to absorb, which eventually resulted in the lowering of wages and a rise in the level of unemployment.

In addition to the above, the rapid inflow of rural persons resulted in an increase in the costs of job search, both in terms of time and income lost. Often, the arrival of newly qualified migrants resulted in the less qualified persons resorting to other than the usual means of job recruitment to avoid being marginalised. This led to highly biased and improper practices in employment recruitment that so often was a handicap to development. Often employment decisions were influenced by factors such as race, family connections, political affiliations, bribery, etc., instead of allowing vacant or new posts to be filled by the most competent of those available.⁵⁵

Another implication of rapid rural-urban migration was that it imposed significant external diseconomies in the form of congestion, environmental deterioration, and overloading the city's social services and social welfare programmes. The most notable effect was the housing shortage it created. Housing facilities in Georgetown, Linden and New Amsterdam have been inadequate since the early fifties.⁵⁶ Since then the inflow of migrants has served to aggravate the shortage. Originally, the three urban areas were zoned into high and low density housing areas to correspond with income and other class differences in the cities' populations. The migrant flows were mainly directed to the cheaper but more crowded wards. The result was acute overcrowding, slums and shanti-town development in those wards.

A review of the housing statistics in Georgetown, in 1970, indicated the distressing state of urban housing in which nearly a third of the country's population resided. Nearly 50% of all households had five persons or more. A fifth had as many as eight or more persons residing in one unit of three rooms. As could be expected, sanitary facilities were generally poor. Nearly 40% of all households shared toilet facilities, and less than 50% had their toilets linked to the sewer network. This factor, together with inadequate maintenance of the city's open drain system, created a serious health hazard to city inhabitants.⁵⁷

The picture of the general urban statistics masks the full social impact

of in-migration. A truer approximation can be obtained if conditions in a typical in-migrant area are compared with a residential area. The housing areas, or wards, chosen are Albouystown as the in-migrant area and Queenstown as the residential area. In the former the average household size exceeded six persons, while in the latter it was only between four and five persons. More important is that houses in Queenstown were larger and more spacious, which meant that there was little overcrowding. In Albouystown however, 80% of the households had on average two rooms or less. Thus, there was considerable overcrowding in Albouystown. The poor conditions were not only in housing. Overcrowding in Albouystown led to the general poverty of the environment. All of the available land was taken up in high density housing of which, in Guyana's case, only a small percentage was owner-occupied. Hence overcrowding, and unwillingness on the part of owners to effect repairs, resulted in the rapid ageing of the buildings with the effect that entire wards took on a slum appearance and were regarded as such.⁵⁸

This, however, did not lower the rate of in-migration to those areas. The fact that housing was cheap there resulted in a large number of arrivals. Between 1960 and 1970 indications are that the rate of increase in overcrowded areas such as Albouystown was twice that of residential areas such as Queenstown. In-migration then contributed directly to overcrowding and slum creation, and hence the social conditions that are congenital and endemic to such areas can be attributed directly to it in such circumstances.

In addition to creating external diseconomies mentioned earlier, rapid rural-urban migration as has occurred in Guyana also created a number of stresses on basic city services. The higher rate of city growth in terms of the capacity of services resulted in a continual deterioration of those services. To cater for unplanned growth placed severe financial burdens on the city councils. Changing city morphology brought about by land speculation, a by-product of uncontrolled migration, presented immense difficulties to city planning agencies and actively hampered urban development programmes.

Although rapid rural-urban migration had a number of negative effects on

urban areas, it did confer some notable benefits. First and foremost, it increased the supply of skilled and unskilled labour to the urban labour market. This facilitated the increase in the growth of manufacturing and processing establishments that occurred in and around Georgetown during the latter half of the 1960-1970 decade. It assured an adequate supply of labour in all employment types - particularly in providing labour for the lower-paid lower-status jobs, i.e. municipal cleaning workers, domestics, casual labour, etc. In a sense, the flow of skilled and educated persons to Georgetown, Linden and New Amsterdam contributed to the functioning of the Government civil and public services in those areas.

Secondly, urban areas, in particular Georgetown, benefited substantially from capital flows from rural areas. This flow was usually cash flows brought to the capital by small entrepreneurs who were disenchanted with the business climate in rural areas, and were attracted by the size and diversity of the Georgetown market.⁵⁹ Another important form of revenue from rural areas was in the form of investment in a 'town property'. Urban property values were increasing by a significant annual margin and, as such, the purchase of a town property was viewed as a sound investment. Although only a small percentage of migrants were able to acquire such properties, it nevertheless represented a substantial drain on rural resources. Cash flows also accompanied migrants. It was quite common for unemployed migrants or children at school in the city, where the best schools were, to receive financial support from the family at home.

Thirdly, urban areas would have benefited from the general increase in employment creation brought about directly and indirectly by the inflow of migrant skills, capital and entrepreneurs.⁶⁰ Both the Manpower Survey in 1965 and the Population Census in 1970 indicated that Georgetown had the lowest rate of unemployment in the country. Also, the above survey showed that during the 1965-69 four-year period, the number of establishments in Georgetown employing five or more persons had increased from 495 to 726.⁶¹ This was during the period when the rate of rural-urban migration was increasing, and thus it could be presumed that migrants had

some impact on mitigating high and rising unemployment. Also, increased income generated by an increase in the numbers employed was available for income-generation through its multiplier effects, to the benefit of the urban economy.

Fourthly, the concentration of population that migration helped to bring about in urban areas allowed a returns-to-scale relationship between investment and the provision of certain social and public services, i.e. public water supply, electricity, sewage and waste disposal, policing, etc. By the above, and in a number of other specific ways too numerous to mention, urban migration has contributed to the gradual centralisation of resources to allow for greater economies of scale to operate in Georgetown, Linden and New Amsterdam.

It was obvious that since most of the country's wealth was created in rural areas the loss of the wealth creation factor, i.e. labour, through migration would have several serious implications on the rural and national economy. In most circumstances out-migration was followed by a loss of production which deepened the general depression surrounding rural areas.⁶² Out-migration tended to induce further migration. The policy, scope and content of rural education contributed to high out-migration of school leavers instead of retaining and re-training them to develop the rural economy.⁶³ However, rural out-migration did not cause depopulation as it might have in a developed economy. The reason for this was that rural fertility was high; but, nevertheless, it entailed a loss of population, and particularly that portion which was most ambitious, articulate and energetic, and could have agitated by various means for improved rural conditions. Also, since migration was age-selective, it resulted in increasing the dependency ratio in rural areas while doing the opposite in urban.

The most significant effect of rural-urban migration was its effect on rural agricultural production. This sector had always been the mainstay of the economy - providing food and accounting for about one fifth of the country's total gross domestic product. It was also the main export earner and the major source of employment for about a third of the entire country's work

force. The loss of rural labour, i.e. farmers and farm labourers, resulted in a slump in production relative to population increases. This occurred in two main ways. First, the out-migration of farmers and farm labourers contributed to the sluggish pace of agricultural production. During the 1960's production increased by approximately 1.5% per annum compared to population increases of 3% per annum. The failure of production to equal population increases was due, primarily, to the failure of sugar and rice to expand.⁶⁴ While sugar production was externally controlled, rice was not. Its cultivation was significantly increased during the 1960's, but productivity per acre declined drastically resulting in lower total production than formerly, when acreage cultivated was lower and productivity higher. (See Table 24 in Appendix for the increase in rice cultivation and the decline in productivity per acre.)

Second, mechanisation and labour saving innovations became widespread and replaced labour intensive high-production methods for extensive cultivation at a lower unit productivity. In the process it made the smaller farmers much more underemployed and the pool of seasonal farm labour redundant. Because farm incomes were generally low and inadequate and farmers - mainly small farmers - were freed from farmwork, many sought employment in wage occupations in urban areas or out of farming. Hence, they had divided loyalties, the result of which was that rice farming, which was more risky and yielded lower profits, was undertaken with less effort and lower husbandry. Thus production declined. Another factor responsible for declining production was that during the mid-sixties the new PNC-UF regime coming to office effected a number of changes that were seen to undermine the viability of rice farming.⁶⁵ In reaction, many East Indian farmers (who were generally anti-government) withdrew their labour, i.e. give up their rice-farming activities entirely for wage labour or continued in a low keyed fashion. Children from such households were discouraged from becoming farmers. Thus the farming population did not increase, and neither did production.⁶⁶

Due to the withdrawal of a significant portion of farm labour, wages in the

industry increased steeply.⁶⁷ In many cases it was over and above the value of work done, making it uneconomical for small farmers to employ additional labour which was necessary due to the seasonality of rice or the seasonal demands of vegetable farming. As such, many farmers limited their cultivation to acreage for which their household labour was adequate. Larger farmers on the other hand preferred not to enter into mixed farming but to substitute labour for machinery and cultivate crops that were not land-intensive.

These developments had a number of repercussions to rural areas. First, the withdrawal of labour leading to the demand for higher wages meant that small scale farming became less viable. Secondly, the withdrawal of both labour and farmers meant that production could not increase in step with population increases. Thirdly, the substitution of labour for machinery led to an increase in the cultivation of labour un-intensive crops. This meant that land, in which the State had invested heavily in the form of drainage and irrigation, was not optimally utilised. And fourthly, since only the larger farmers were machine owners and peasant farming under mechanisation (or with inputs of same) was not profitable, small farmers became progressively poorer and more dependent on their larger counterparts. Thus indirectly, out-migration which led, in part, to the creation of such conditions, helped to increase the income gap between poor and not-so-poor farmers.

It would be untrue to say that rural-urban migration in Guyana was wholly disadvantageous to rural areas. In fact it did bestow some notable benefits, some of which are discussed here. First, education in rural areas was not oriented towards training individuals for agricultural occupations but for clerical and related which were not available. Thus rural-urban migration acted as a safety valve, which allowed the outflow of population which rural areas did not have the capacity to absorb. Secondly, since most of the migrants were sponsored in their initial move, there was a remittance of cash to rural origin areas - which to some extent lessened the impact of the loss of rural cash to urban areas in the first instance. The few migrants who did return usually did so with a reasonable amount of cash to cause

some impact in their area of return. Also frequently East Indian migrants would send cash to either improve family dwellings or to purchase land.⁶⁸

The establishment of a member of the family, kin or close friend in any of the urban areas meant a significant amount of personal mobility between that area and its rural base. This facilitated the diffusion of relevant urban information to family at home, and to the community. Benefits to the community were obvious. More rural persons who were unemployed, or who could increase their incomes by migrating, were induced to and finally did so. The continual dissemination of information on urban life-styles, mannerisms, consumption etc. gradually drew the more or less self-sufficient communities into the 'urban monetary nexus'. Money became increasingly important and led to some transformation in agriculture. Market gardening became the important agricultural type in the peripheral areas of Georgetown.

The degree of modernisation and liberalisation that is generally brought about by migration led to the discontinuation of a number of backward and antiquated rural practices and beliefs. East Indians were aroused from their nonchalant outlook on life. Many in this ethnic group realised that a livelihood could be obtained from a number of activities other than rice-farming, and so abandoned their farming activities for higher income occupations. Rural Africans too gradually expanded their horizons through migration. They became aware of the attractive employment and other opportunities existing in Linden and Georgetown and rapidly migrated to those areas. Gradually, migration effected a change of rural attitudes, life-styles and orientation in even the remotest of communities. Those areas that were closer to Georgetown and New Amsterdam began to imbibe a pro-urban outlook that was reflected in the similarity of their production and consumption to urban areas. Thus rural-urban migration, during the period of analysis, served to lower the rate of employment among certain sections of the rural population, and in so doing it allowed more rural persons to benefit from the higher urban incomes and the generally improved living conditions in urban areas.

From the individual migrant's point of view, migration from the relatively stagnated rural areas was a sound investment. Despite the high rate of urban unemployment and the long period of waiting in some cases, migrants on the whole seemed to have enjoyed greater economic success than their counterparts who stayed behind.⁶⁹ In urban areas those migrants who found employment were able to benefit from the high urban wages available there, and from superior urban facilities such as housing, commercial, recreation and services, i.e. education, health, etc. Also, by migrating, migrants greatly improved their 'social standing' and that of their family in the community at home.⁷⁰ The alternatives to migration were bleak in particular, if the rural individual did not own an economic parcel of land or machinery, or was employed as a civil or public service employee of which there were few posts in rural areas. In the case of the small farmer who was not able or inclined to migrate, life became a ceaseless toil for poor returns. In the case of a landless labourer too poor to migrate it was even worse. Employment was irregular, wages low and conditions of employment, at best, were poor.

In conclusion rural-urban migration in Guyana in the post-war period (up to 1970) had a number of disadvantages and, at the same time, benefits to the sending (rural), receiving (urban) and the national economy. From the sending areas it entailed a loss of the 'cream' of its population. In some areas this loss resulted in rural areas becoming more depressed and stagnated. To the national economy the out-migration of practising and potential farmers and farm labour resulted in a loss of vital agricultural production and so food supplies and export earnings to the country. However, benefits to the nation as a whole were that more persons were earning the higher wages of urban areas and benefiting from the improved living conditions there. Advantages of rural-urban migration were that it acted as a safety valve in relieving high rural unemployment, remittances sent were a valuable source of rural cash, and increased mobility which resulted from migration caused a gradual assimilation of rural areas into the urban monetary economy.

8. Conclusions

It is the observation here that rural-urban migration in Guyana is not a simple process. With the exception of the 'expected income' model of Todaro, most of the models discussed earlier seem only to explain partially Guyanese migration, or are of little relevance.

It should be noted that it was not possible to test the Todaro model in Guyana for lack of precise data on urban and rural wage levels or the level of employment in rural and urban areas. Nevertheless, the model seems to have much more relevance to the observed pattern of Guyanese migration than the other models examined. Support for this view comes from the observation that the highest rates of rural-urban migration are from the poorest agricultural areas where urban-rural disparity is expected to be highest and so the difference in expected rural and urban incomes greatest (pp. 94-97).

If we treat each ethnic and educational group separately Todaro's model appears to explain migrant decision-making and the patterns in which Guyanese migrate. Taking African migration, they have been shown to have a low level of land (and property) ownership in rural areas (pp. 97-98) and a lesser tradition of farming and so could be expected to have a relatively low net income stream in rural areas. But since this group had a higher level of education than others (p. 65) and a long tradition of urban migration (pp. 68, 73) and the fact that a number of 'cultural factors' operate in their favour to give a relatively high probability of urban employment and hence, incomes, their rate of out-migration was higher than other groups (pp. 74; 97-99).

Similarly, East Indians, who were the major rural land-owners (p. 65), had a stronger rural economic base and little tradition of mobility. Because of this and because a number of 'cultural factors' operate to keep their employment probabilities and expected incomes low, this group had a low rate of urban migration. Hence the model would indicate that Africans are likely to have a relatively high rate of rural-urban migration while East Indians, a lower rate which fact is corroborated by the data presented in sections three to six of this chapter.

In their applications of the model in Africa, Todaro and Godfrey used average rural and urban wage and employment rates, thereby implying a certain degree of homogeneity in the societies they were examining. Because of the sharp ethnic and cultural diversity present in Guyana (see Chapter II) and the fact that 'irregular factors' influence urban job recruitment (p. 101) the use of such simple wage and employment assumptions seems to be a dangerous simplification. It would be wiser to apply the model hierarchically to each group even though, as shown above, it would appear to fit at the micro level.

Secondly, the model does not seem to take into consideration the indirect benefits that accrue to the migrant by way of spouses' and children's income which may very well influence the rural individual's decision to migrate (p. 21). Thirdly, it is the view here that the model could better fit the Guyanese situation if the basis of decision-making is changed from the individual to the family. This however does not alter the basic decision-making framework; it only implies that the family, in this case, behaves as the rational decision-making unit.

Despite the above shortcomings, the Todaro model seems the most useful of those discussed in the Guyanan context. First, the model shows that as long as wages in Georgetown, Linden and New Amsterdam are higher than rural wages, and opportunities to obtain that wage seem to exist, migration from rural areas is likely to continue. Secondly, in the poorest agricultural areas such as Essequibo Coast and West Berbice (see pp. 94-97) where the difference in expected rural and urban income streams is likely to be highest the rate of urban migration would also be highest, whereas in East Berbice and in the rural areas of Demerara, where the difference is lower, the rate of urban migration is likely to be lower (see Tables 13 and 14 in text). Thirdly, since Georgetown is the main employment centre (pp. 89-90) it has the highest probable net returns which explains why it was the main destination of migrants (pp. 89-92).

Fourthly, to a large extent the model explains the character or selectivity of migrants. They are mainly young individuals because the ability to earn and achieve high incomes seems to increase with time spent in the urban area. The educated seem to have a higher propensity to migrate since the difference between their rural and

urban net income streams appears to be greater than others at the place of origin. Female migration seems to be greater than male for the same reason. Also, this reason explains the differential ethnic migration observed (see pp. 97-98).

The Todaro model also seems to have relevance to policy making in Guyana which sets it apart from most migration models. We may regard the model as an index of local under-development. Applied at the micro-level by place and by race it can show which groups are migrating from where and the rate of migration. With relevant data the model might be useful in predicting the rate of rural-urban migration and so be a useful tool to planners and decision-makers in calculating levels of urban congestion, employment requirements, future housing and other welfare needs. However, since it is the opinion here that the rate and pattern of rural out-migration has a net negative effect on sending areas, and that agriculture forms the only feasible basis for prosperity in the future in Guyana, the following chapter sets out to examine more fully the causes of rural under-development and to suggest a set of policies designed to improve the rate of rural development and so to arrest rapid rural-urban migration and to minimise its negative effects.

CHAPTER IV

POLICIES TO ARREST RURAL-URBAN MIGRATION

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1. Introduction

In view of the consequences of migration presented in the preceding chapter a radical development strategy with a heavy rural bias is urgently needed if the present down-turn in the economy is to be halted and momentum generated for continued economic growth and social development. This chapter sets out to present some of the more important policies of such a strategy and to emphasise their development implications to the economy. It begins by examining the present trend of decline in the major export sectors and to note its consequences in generating further decline. It then identifies the main reasons for the decline and, in some detail, discusses some of these with evidence from the two major rural activities - sugar and rice production. Finally, it presents a package of policies needed to bring about an appropriate rural-urban economic balance, which is a necessary precondition if the rate of rural out-migration is to be arrested and from which integrated rural and national development can be initiated.

2. Recent Trends in the Economy

From a development perspective the 1970-80 decade was one of growth and decline to the Guyanese economy. The decade began with the economy growing fairly steadily but after reaching a peak by the middle of the decade it declined sharply. As an indication of its performance, the average annual increase of the gross domestic product (GDP) at current factor prices during the decade was nearly 12%. However, nearly all of this growth occurred during the 1970-75 period, as the following table shows. From the beginning of the period of decline in 1976 the average rate of increase was only 2% compared to nearly 20% in the 1970-75 period.

TABLE 16 Gross Domestic Product at current factor cost, 1970-1980
(G \$Mn.)

| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 |
|----------------------------|------|------|------|------|------|------|------|------|------|------|
| GDP | 467 | 500 | 529 | 576 | 865 | 1093 | 1055 | 1006 | 1056 | 1170 |
| Percent Annual Increase | | 7 | 6 | 9 | 50 | 26 | -4 | -5 | 5 | 11 |

Sources: 1. The Guyana Economy, General Facts and Development Prospects, Min. of Information, 1976, Georgetown
2. Bank of Guyana Annual Reports, Georgetown
3. Budget Speeches, 1977, 1978, 1979 Min. of Economic Dev. & Cooperatives, Georgetown.

It should be noted that the seemingly high average rate of increase in the GDP was not due to increases in the economic sector but to services¹. Since prices fluctuated greatly during the decade, the GDP at current factor cost is not a highly useful measure of real growth. At constant factor prices the increases were rather modest. At 1976 prices the average annual growth was only 2.7% in the more prosperous first half of the decade. Since then the economy has stagnated showing very little or no growth and a period of an actual reversal of growth.

The degree of openness of the Guyanese economy was unaltered during the decade. Many of the consumer and intermediate and all of its capital goods were imported. The extreme dependence on the exports of sugar, bauxite and rice also continued. Together these three products accounted for an average of over 90% of total exports by value. As a result of this, the failure or low production in these industries has had adverse effects on the entire economy. This was reflected in the second half of the decade when the production of the two main export commodities, sugar and bauxite, declined (see table below).

TABLE 17 Production of Sugar and Bauxite in the First and Second Half of
the 1970-1980 Decade

| Industry | Average Production (tons) | | % Increase Decrease + / - |
|----------|---------------------------|-----------|---------------------------------|
| | 1970-1974 | 1975-1979 | |
| Sugar | 325 | 299 | - 8 |
| Bauxite | 2812 | 1895 | -33 |

Sources: 1. Bank of Guyana Annual Reports
2. Budget Speeches 1979, 1980.

Since the decline occurred at a time when imports were dearer its effects were extreme. The most serious outcome was that it led to a large balance of payments deficit, which endangered the country's international credit worthiness. In fact, by the end of 1976 declining production along with declining value of exports resulted in the foreign exchange situation becoming so critical that the country was forced to exist on a hand-to-mouth basis. Its survival was only maintained by running its international reserves and by substantial capital inflows by way of overseas loans. Even with this facility, at the end of 1979 the deficit on the current account was 184 million dollars or 15% of the country's Gross National Product.

TABLE 18 Imports and Exports of Goods and Services and Balance of
Payments 1970-1979 (G \$Mn)

| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 |
|---------|------|------|------|------|------|------|-------|------|------|------|
| Imports | -350 | - | -367 | -457 | -660 | -936 | -1080 | -801 | -700 | -785 |
| Exports | 305 | | 344 | 333 | 650 | 908 | 745 | 661 | 745 | 737 |
| Deficit | -45 | | -23 | -124 | -10 | -28 | -335 | -140 | +45 | -48 |

Sources: 1. The Guyana Economy, op cit
2. Ministry of Economic Development, Georgetown
3. Budget Speeches, 1979, 1980.

The foreign exchange famine also seriously affected the country's external debt obligations, the servicing and capital payment of which has to be made in foreign currency. A conservative estimate puts the country's external debt in 1978 at 761 million dollars which is a 43% increase since the country began to experience trade deficits since 1976.

In response to the foreign exchange predicament that seriously affected the welfare of all Guyanese, the Government, instead of devoting all its energies to stimulating and diversifying production, embarked on an austerity programme. (It should be noted that many of the non-essential consumer items were already controlled.) A vigorous policy of import restraint was pursued as the view was held that this was the practical way of solving the foreign exchange crisis. The main instrument of this policy was the External Trade Bureau set up to monitor internal needs and to allow the importation of only those goods which were considered essential. In this way the Government had complete control over all imports and was able to effect further cutbacks on the level which was already very conservatively set. As a result import cutbacks of 26% and 12% were achieved in 1977 and 1978 respectively. Although such cutbacks gave some respite by way of reducing the import bill, by being overzealous and insensitive to local needs they reduced the importation of goods that were essential to the well-being of the economy. This actually hindered attempts at revival and contributed in the following way to accelerating the decline.

First, by severely restricting the importation of essential items of food and semi-durables, which either could not be produced locally in sufficient quantities to meet local demand or for which substitutes were unavailable, it created an acute shortage of food and items of everyday household use. This created a chaotic situation in the country. Queueing for selected consumer items, as is common in many Socialist economies, became widespread. The hoarding of foodstuffs and blackmarketing aggravated the shortage situation. Prices, as a result of these developments, doubled and quadrupled within a short period. Secondly, the reduction of intermediate goods, which included fuels and lubricants, spare parts and accessories etc,

that resulted from the Government's import policy created a severe bottleneck to agricultural and other production and to services. Thirdly, the reduction of capital goods such as construction and transport equipment, agricultural machinery, building materials etc brought much of the Government's Development Programme to a virtual halt. The shortage of agricultural machinery such as tractors, harvesters etc was disastrous to the food production drive. Except for a few high priority Government projects the periodic shortages of essential building materials such as cement etc, drastically reduced public sector and private activities in the building and construction sector.

The climate of shortages and allegations of widespread public sector corruption and mismanagement (that was seen to have created the shortages) generated a tremendous amount of unrest and Government opposition. One form in which this was expressed was in waves of industrial action that crippled production in key industries such as Sugar and Bauxite. An example of this is that in 1978 and 1979 the number of strikes and man days lost resulted in sugar production falling short of its expected target by 10% and 17% respectively. In the case of bauxite it was even higher at 16% and 17% (see table below).

TABLE 19 Number of Strikes, Man Days Lost and Production Shortfalls
1978, 1979

| Industry | No. of Strikes | | Man Days Lost | | Production % Shortfall | |
|----------|----------------|------|---------------|--------|------------------------|------|
| | 1978 | 1979 | 1978 | 1979 | 1978 | 1979 |
| Sugar | 241 | 158 | 72875 | 139091 | 10 | 17 |
| Bauxite | 14 | 15 | - | 173441 | 16 | 17 |

Source: Budget Speech 1980, op cit

The situation of shortages and unrest in the latter half of the decade was a major setback to production. Production of sugar and rice, the two major crops, fluctuated tremendously throughout the decade. On average, sugar

production throughout the 1970-80 decade was slightly above its 1970 production but significantly below Government production targets. Rice production fluctuated even more than sugar. Taking the production in 1970 as a constant the average production in the decade was below that of 1970 and this was in spite of the massive Government campaign to double production by the end of the 1970 decade. Production of other food crops increased appreciably but in many cases it was below target levels. There was a small increase in meat production due mainly to increases in poultry production. Egg production also increased but milk and dairy products declined drastically. Manufacture increased appreciably until 1974. Indications are that this level was maintained through the decade. Mining, however, mainly bauxite mining, declined significantly. The production of dried bauxite declined to below 40% of its 1970 level. The higher priced calcined bauxite showed a slight increase.

TABLE 20 Indices of Production 1965-1979

| Commodity | Unit of Production | Production in 1970 | 1965 | 1970 | 1972 | 1974 | 1976 | 1978 | 1979 |
|---------------------|--------------------|--------------------|------|------|------|------|------|------|------|
| Sugar | '000 tons | 310 | 100 | 100 | 102 | 110 | 106 | 104 | 96 |
| Rice | " | 142 | 116 | 100 | 66 | 101 | 77 | 127 | 100 |
| Coconuts | Mn nuts | 28.5 | 116 | 100 | 93 | 86 | 110 | *82 | - |
| Ground Provisions | Mn lbs | 40.5 | - | 100 | 110 | 121 | 118 | *133 | - |
| Plantains & Bananas | " | 33.6 | - | 100 | 96 | 92 | 102 | *112 | - |
| Citrus | " | 23.0 | 117 | 100 | 104 | 111 | 100 | *117 | - |
| Meat (Beef) | " | 8.8 | 98 | 100 | 109 | 94 | 100 | - | - |
| Milk | Mn gals | 4.3 | 102 | 100 | 84 | 56 | 63 | - | - |
| Eggs | " eggs | 24.2 | 74 | 100 | 110 | 141 | 174 | - | - |
| Bauxite | '000 tons | 3293 | - | 100 | 80 | 74 | 52 | *50 | 55 |
| Manufacture | - | 100 | - | 100 | 120 | 147 | - | - | - |

* 1977 production

(Table was compiled from various sources and own calculations)

Sources: /

- Sources: 1. Bank of Guyana Annual Reports 1976, 1977
2. IBRD - Current Economic Position and Prospects of Guyana, Vol II Agriculture, Central America and Caribbean Dept - Tables 1-6 appendix
3. Ministry of Agriculture, RD & Planning Div, Georgetown
4. Ministry of Economic Development, Annual Stat Abstract 1974, Tables 1-1 to 1-9.
-

Since exports remained low the Government, which was the major employer, had to curb its annual intake and redeploy or make redundant all 'posts' deemed 'non-essential'. This, along with contracting employment in the private sector, caused unemployment and underemployment to rise to unprecedented levels². The Government also instituted a package of wage increases in which the basic wage increased by 100% since 1976. This gave a fillip to inflation and deepened the recession. Partly as a consequence of these factors, the rate of crime and lawlessness in the country soared dramatically. The apparent failure of the security forces to arrest this trend resulted in a perpetual state of uneasiness and insecurity in the country. Another disquieting trend was that the shortages and their resultant effects tended to polarise the two main groups, East Indians and Africans.

The most significant development during the decade, in spite of Government attempts at laying the infrastructural foundations for national development, was the increasing urban-rural differentials in income and general conditions of life. Rural areas experienced the higher rates of population growth and suffered from steadily increasing underemployment and 'open unemployment'. Shortages were more acute and prices higher. The effects of Government cutbacks in services and the recession of the Government development programme were more pronounced here than in urban areas.

3. Causes of Recent Decline

Observing the Guyanese economy two trends are immediately identifiable. One is that production on the whole has been sluggish. In some cases, such as in sugar and bauxite, it has been declining with the result that the volume of exports has also been declining. The other is that attempts to diversify production and exports have not been very successful. The economy continues to depend heavily on the production and export of sugar, bauxite and rice. Since none of these are high-demand world commodities export prices have been fluctuating and, in real terms, have been declining while the prices of imports were rising. But while these may be more discernible factors the root cause of the stagnation and decline lies in the way the country's natural and human resources are utilised. The country is endowed with vast quantities of fertile land, with some useful minerals occurring within reasonable proximity to the coast and the labour supplies to exploit these resources, yet the conditions and quality of life of the majority of its people have not improved significantly during the last decade and a half³.

Most ironical, the areas where these resources occur, i.e. rural areas, are the least developed. Where agricultural land is the resource crop production has remained low. Indirectly, this has contributed to the lack of dynamism in the economy. This is because agriculture, which directly and indirectly employs one half of the country's workforce, is hindered by three major problems. The foremost of these is that colonialism created a marked dualism in agriculture where large efficient plantations (sugar) occupied the best lands and enjoyed concessions and privileges from the State. Peasant agriculture, on the other hand, took place on fragmented plots in more or less marginal lands and received very little help from the State. As a result, the latter was largely oriented towards food production except for rice, in which case large surpluses were available for export. Hence, the background to the present low level of agricultural development was that the peasant sector was harnessed to provide food for the cultivators themselves and for the workers in the raw-material-export industries⁴.

Secondly, there was little diversification in agriculture. Food production

was only in a few crops. Apart from sugar only rice emerged as a commercially viable crop and these two largely dominated agricultural production. Many of the items of food that could be produced locally were imported. Most important was that the imported items were heavily subsidised which undermined indigenous production. Thirdly, a multitude of problems have collectively stifled enthusiasm and prevented the necessary increases in productivity to strengthen the industry. Some of these problems include a shortage of land arising from its very unequal distribution and its resultant effects of fragmentation and landlordism, the absence of proper tenancy reforms, falling prices of agricultural products in relation to costs, institutional handicaps, a strong occupational stigma attached to farming, a low level of rural services, and a tendency for disenchanted farmers and farm labourers to migrate resulting in a small increase of new farmers and serious shortages of farm labour.

The following are some of the more specific constraints to production in the individual industries.

(i) The Sugar Industry

The sugar industry is by far the largest in the country. For a number of years the economy of Guyana was regarded purely as a 'sugar economy'. At present the growth of sugar cane occupies about one-fifth of the total cultivated acreage and, with the manufacture of sugar, employs the largest proportion of the country's wage-labour force. In the national economy sugar production accounts for approximately 30% of the total gross domestic product. If the industries linked with sugar are included then it increases its share to between 40-45%. The industry is also a major earner of net foreign capital. During the 1974-77 period sugar alone accounted for an average of nearly 45% of the country's total domestic exports. The role of the industry in the Guyanese economy, succinctly put by a local researcher, is that "when production is high and the average export price is normal, the entire economy is buoyant, whereas in years of low production and reduced average prices there is usually economic depression in the country" (Sukdeo, 1978 : 32)⁵.

While export prices depended on exogeneous factors beyond the influence of the industry, the production of sugar did not. It was here that a number of factors operated to hinder the full benefits of the industry to the national economy. Because the industry, until its nationalisation in 1976, was externally owned and controlled, many of the noxious practices of absentee ownership were evident. Wages were always low and working conditions poor. Many of the biases and prejudices that were used to subjugate workers in the indentureship period persisted. The structure and practices of estate management did little to create a climate conducive to production. The 'overseas' high level management remained as an elite group within the larger estate community. The local middle-management that it created were allowed a few privileges and proved to be hard task masters and guardians of the Estate's interests. As a result of this workers were estranged from management, which was a severe setback to good industrial relations and level of production.

Also, because of foreign ownership and control the industry was organised on a purely profit-maximising motive. In addition, the emphasis seemed to be on short and medium term profits rather than on planning and orienting the industry to cater for the anticipated long term sugar demand. This was reflected by the following factors. A proportion of sugar producing lands was disposed of while new acreage brought under sugar cane cultivation was small. The productivity per acre, in terms of volume of canes produced and sugar content of canes, was allowed to decline in order to attain a higher cost-effectiveness in its operations. Double cropping, by bringing forward the reaping time of canes, was done to compensate for declining productivity and the small increases in new cultivation. (This is possible since the sugar-cane plant regenerates from ratoons.) Also, little positive effort was made towards securing stable industrial relations. Workers frequently protested against low wages and other estate impositions by withdrawing their labour. This resulted in production fluctuating tremendously as can be seen in the following table.

Over the 29 year (1950-1979) period the production of sugar did not increase significantly nor steadily as did the acreage of sugar-cane harvested.

Analysing sugar production in the five-year period the table below shows that it increased fairly rapidly from 1950 to the mid 1960's. Since then the increases were insignificant, relative to acreage reaped it declined. Productivity, in terms of tons of sugar produced per acre, also declined. However, not only did total sugar production and productivity per acre decline, but the industry had been mechanising and, as a result, had reduced its workforce by nearly 40% between 1950 and 1970⁶. Sugar output was only maintained by increased worker productivity⁷.

TABLE 21 Acreage Harvested and Sugar Produced 1950-1979

| Year | Acreage | Tons of Sugar | Tons of Sugar | % Increase +/- Decrease | |
|---------|-------------------------|------------------------|----------------------|-------------------------|-------------------|
| | Harvested *(Average) | Produced *(Average) | Produced per Acre | Acreage Harvested | Sugar Produced |
| 1950-54 | 70,729 | 227,006 | 3.2 | - | |
| 1955-59 | 80,748 | 277,840 | 3.4 | + 14 | + 22 |
| 1960-64 | 99,694 | 312,145 | 3.1 | + 23 | + 12 |
| 1965-69 | 111,931 | 324,710 | 2.9 | + 12 | + 4 |
| 1970-74 | 125,066 | 125,066 | 2.6 | + 12 | + 1 |
| 1975-79 | **(149,000) | 299,000 | 2.1 | +(12) | - 7 |

* Average of 5 year period
 ** Estimated from Sources below

Sources: 1. Min of Agriculture, R and Pl Div, op cit
 2. Min of Economic Development, Annual Statistical Abstract, 1974, Table 1-5
 3. IBRD, op cit, Appendix Table 1.

The poor performance of the industry as shown above was largely due to management and operations of the largest company, i.e. Bookers Brothers Sugar Estates Ltd, which more or less controlled the entire industry⁸. Because the Company was a subsidiary of a large multinational corporation external forces shaped the policies that determined the scale and nature of its operations⁹. One prominent such policy was that the industry expanded rather slowly in spite of reasonable profits which were made¹⁰. As shown

by two prominent local researchers, i.e. Thomas (1977)¹¹ and Sukdeo (1973, 1978)¹², whatever expansion that occurred was due largely to depreciation allowances and very little to retained earnings except in years when profits were excessively high. Certainly no new capital was invested in the industry since the end of the 1950's. The slow rate of expansion was significant for two reasons. One was that since a great portion of the country's resources was tied up in this industry its slow expansion implied an under-utilization of those resources. The other was that since this industry was the major earner of revenue its slow expansion meant a loss of revenue.

Another major policy of the Company was that, presumably in the interests of maintaining a high level of profitability, a situation of poor industrial relations which arose in the early 1950's was maintained. In each crop-grinding season a considerable number of work-stoppages (strikes) occurred. These were due almost entirely to inter-union rivalry in certain sections of the industry and to wage grievances against the Company¹³. In the latter case the Company was shown to employ an accounting technique which reduced profits to a trickle, and on the basis of this negotiated for small wage increases. Because the Company usually bargained from a strong position (often with active State support)¹⁴ the strikes were often protracted as workers would be equally adamant against the management's impositions. The result of these strikes was that production fluctuated in the manner depicted in Table 23. The wider implication of this was that, since much of the country's current and capital development expenditure depended on sugar exports, development was slow or was limited to spurts of activity instead of being continuous.

A third major policy contributing to low production was that productivity per acre declined rapidly from the late 1950's, with little or no real attempt by the Company to arrest this trend. Declining productivity per acre was due to a combination of developments in the industry viz, a programme of mechanisation was pursued with great vigour and, as hand methods were being replaced, the level of husbandry declined. In the late 1950's the

estates discontinued the practice of long flood-fallowing. The inputs of fertilizer which were to be substituted for this practice were too small to be effective. To save on planting costs ratoons were extended (more crops were reaped from one 'planting'). Also, from the early 1960's there was a massive 'bringing-forward' of the reaping time of canes to make up for low yields and slowly expanding cultivation¹⁵. To one observer this practice was "tantamount to raiding the following year's production".

As a consequence of the above policies the output of canes per acre and sugar produced declined substantially. Due to declining husbandry and the bringing forward of the reaping, the sucrose content of canes reaped declined with the effect that in the late 1970's the output of sugar per acre was nearly 40% below what it had been twenty years previously (see Table 21 column 4). If mechanisation had been used to complement labour instead of displacing it, and if some of the labour intensive methods such as weeding, mulching and long flood-fallowing etc had been continued, then production in the 1975-79 period would have doubled, assuming the 1955-59 level of production was maintained. As such practices were not continued the fall in output per acre had to be made up by reaping more canes (i.e. an increase in the acreage reaped). The reason for its production policy was clearly that the Company aimed at attaining a high cost-effectiveness in its operations. But by having such a policy the Company indirectly denied the full benefits of the sugar industry to the nation. If the Company had adopted a less mechanised production policy more of the rural labour force would have been employed and more sugar would have been produced by the labour intensive methods that this implies.

(ii) The Bauxite Industry

In terms of revenue to the nation this is the second largest industry. Its production performance, however, was poor. Except for calcined bauxite the output and exports have been declining since its nationalisation in 1971. The decline was due to a combination of marketing difficulties, adverse weather¹⁶ conditions and poor industrial relations¹⁷. Even with the

acceptance of the first two constraints, if good industrial relations had prevailed and the 1971 (year of nationalisation) level of production was maintained, then, by the end of 1976, the industry would have increased its gross revenue by nearly 20% or by \$53.3mn. In absolute terms this sum represented 70% of the rice exports during that year.

(iii) The Rice Industry

The rice industry ranks as the third largest industry in the country. More than twice the acreage under sugar cane cultivation is under rice cultivation, and the industry supports more of the country's inhabitants than the sugar and bauxite industries combined. In the national economy rice is the staple food crop. It is also a major foreign exchange earner, increasing its share of gross domestic exports from 7% in 1970 to 10% in 1977.

Rice was first introduced from the United States of America to Guyana by the Dutch and the French during their respective occupations of the country during the 18th century. The early, sporadic, attempts to grow rice were by runaway negroes and ex-slaves. Later, at the end of the 19th century, rice culture was made popular by the immigrant East Indian coolies¹⁸. Most of the vacant cultivable lands were put under rice cultivation. By the mid 1940's an estimated 76,000 acres were under rice. Twenty years later (by the mid 1960's) the acreage had grown to approximately 364,000. Since then it has declined somewhat, averaging about 300,000 acres annually.

The fivefold increase in rice acreage between the mid 1940's and mid 1960's was made possible by a massive investment programme oriented towards the production of rice (see Chapter 2, Section 6). The investment was primarily in drainage and irrigation projects, and land development and related schemes. The strategy was that by laying the necessary infrastructure the surplus rural labour would be harnessed to exploit the comparative advantage the coastlands have for the production of rice. It was realised that rural development was necessary if the nation was to attain a reasonably high rate of economic growth and social development. However,

these expectations did not materialise. The investments made to develop the rice industry had a longer than expected gestation period, due mainly to bad planning. Returns to the State were low because production rose sluggishly. Rural unemployment and underemployment remained high. Overall, the rate of rural development was not improved. The majority of the rice farming population remained in varying degrees of poverty and economic distress from which many sought to escape by migrating and, by so doing, reduced production on which the export economy so much depends. As to how this dismal state of affairs came about when the rice industry was regarded as a veritable panacea of rural and national development, the following analysis attempts to show.

The first major problem in the industry is that for a number of years there has been a paradoxical situation of an acute shortage of land in a country where land is considered to be in surplus. This has come about for three reasons. The first was that the land policy present was not conducive to an easy distribution of reserve State lands for cultivation purposes. The State's land policy was designed with the implicit intention of limiting the alienation of State lands and to encourage the intensive use of the lands already alienated. This policy was followed since 1931 and has changed very little over the years¹⁹.

To a large extent the policy discriminated against peasant ownership. Land was only issued in large blocks, which meant that only large (existing) landowners and wealthy persons could acquire or found it easy to acquire the cheap State lands. The policy also gave existing landowners the automatic right of ownership of all new lands to be taken up adjacent to their plots²⁰. By so doing it denied land to the growing number of landless persons and land hungry small farmers and created in the process a class of rapacious landlords who illegally, according to the terms of their leases, sublet, transfer, mortgage and fragment State lands. The policy also encouraged land hoarding, and in many cases land which had been drained and irrigated at considerable State expense was kept out of productive use or unbeneficially occupied. These developments greatly aggravated the shortage. Because

landlords wielded a considerable amount of political power they were able to stifle attempts made to redress this situation. Hence a situation of land scarcity remained, with fragmentation and other features inimical to the beneficial use of the country's land resources to its inhabitants increasing.

The second major cause of the 'land scarcity' is that the conditions of land tenancy are very much undeveloped. In the case of State lands the conditions under which they were leased were too vague to enforce measures to prevent the various malpractices occurring in the use of land. To govern private landlord/tenant relationships an ordinance was enacted in 1956 which authorised the setting up of Committees with powers and functions to fix rents and decide on the terms of usage of land²¹. They were also to determine the conditions under which the tenant is dispossessed and land resumed by landlord and the amount of compensation to be paid by either party to the other as the case might be. But the functioning of these Committees was most unsatisfactory. Their powers were very vague, many of the key clauses of the Ordinance were ambiguous and legal back-up services were absent. Another reason was that the Committees consisted largely of Public Servants who had little knowledge or experience in agriculture. As a result of the absence of formal tenancy regulations tenants are at the mercy of landlords. Rent increases and tenant evictions are arbitrary landlords' decisions. This effectively prevents the development of land for agriculture and dampens farmers' enthusiasm for raising the level of productivity.

The third major cause of land shortage is that the existing stock of land is extremely unevenly distributed. Out of nearly 40,000 holdings in which rice was cultivated in 1962, 55% were uneconomic holdings below 5 acres and another 24% of the holdings were between 5-10 acres in size. Only 13% of the holdings were economically sized, at between 10-20 acres. A slight 5% of the farms were medium sized, while 2.2% were large at more than 50 acres. But these 2.2% of large farms occupied nearly 36% of the farmland while small farms, which were more than half of all farms, occupied only a little over 10% of agricultural land. Combined, the total number of holdings less than 10 acres, which comprised nearly 80% of all holdings, occupied

less land than the few large farms (see Table 22).

The maldistribution of land was not righted, but rather increased in time. In 1977, 15 years later, out of nearly 32,600 holdings under agricultural usage nearly 60% were small, being below 5 acres. The number of large farms over 50 acres increased, which meant that more of the total land available was in large holdings (see Table 22, Column 3). Comparing the changes over the 15 year period, the acreage under rice had increased by approximately 20% between 1962-1977 but the number of holdings had declined significantly. Assuming that rice farms comprised 85% of total agricultural holdings in 1977, then the number of rice farms had declined by a third since 1962. This meant that there was a substantial amount of consolidation of the larger farm sizes on one end of the land distribution spectrum while fragmentation increased at the other end²².

TABLE 22 Land Distribution by Size of Rice Holdings in 1962 and
All Agricultural Holdings 1977

| Size of Holding | Percent Rice Holdings in Category 1962* | Percent Total Holdings (Rice Included) in Category 1977** | Cumulated Percent of Holdings in Category 1962 |
|--------------------|--|---|---|
| 0-5 | 55.3 | 58.3 | 100.0 |
| 5-10 | 24.2 | 20.6 | 89.3 |
| 10-20 | 13.0 | 14.5 | 66.5 |
| 20-50 | 5.3 | 4.1 | 44.5 |
| 50-100 | .9 | 1.2 | 35.9 |
| 100+ | 1.3 | 1.3 | 28.3 |
| Total No. Holdings | 39,763 | 32,588 | (234,000 acres) |

Sources: * Rice Producers Association, Georgetown
 ** Crop Reporters Special Tabulations, Ministry of Agriculture,
 Resource & Planning Div, Georgetown

Note ** Rice farms are estimated to constitute 80% of the total number of farms.

Despite the existence of the gross inequality and maldistribution of land resources, Government efforts did little to alleviate the situation. In its attempts to increase the supply of land via land development schemes, drainage and irrigation, only small acreages were brought into cultivation. The reason for this was that expensive prestige projects were indulged in. A typical example of one such case was the Black Bush Land Settlement Scheme. The scheme, completed in 1962, settled 1,172 families at a total cost of \$17,000 per family²³. This was a phenomenal sum considering the financial resources available, the need for cheap land, and the alternative ways in which land could have been made available cheaply. Compared to the proposals of Berrill, who emphasised the need for agricultural expansion, the cost of providing land and settling one farmer in the Black Bush Scheme was seven times higher than what he initially considered to be high. Thus, if the finances available had been more prudently used as Berrill had advocated, the acreage of new lands brought into cultivation would have increased sevenfold. This would have nearly doubled the entire rice acreage of the early 1960's and would undoubtedly have reduced fragmentation and pressure on existing land.

Apart from the scarcity of land and related factors, a major setback to the industry was that the production of rice increased only modestly. The acreage cultivated and proportion reaped, on the other hand, expanded rapidly. This was in spite of the introduction of labour saving technology, higher yielding varieties and more efficient crop production methods since the early 1960's. Analysing production trends over three decades, Table 23 shows that production increased gradually until the end of the 1960's. In the early 1970's it declined, but picked up moderately in the second half of the same decade. Acreage reaped (and cultivated) increased at a greater pace but in the same trend as the production of rice. Comparing the two, by 1969 the acreage reaped had increased by 200% while the production of rice by only 125%. After the decline in the early 1970's, rice production showed a slight improvement over acreage reaped due to the adoption by farmers of higher yielding rice varieties. Nevertheless, by 1975-76 the acreage reaped exceeded that in 1946 by approximately 176,000 acres or by

177%, while production of rice increased by only 73,000 tons or by 118%.

TABLE 23 Acreage Reaped and Production of Rice, 1946-1976
(Average of Five Year Periods)

| Year | Acreage Reaped | Rice Production (Tons) | Paddy Yield Per Acre of Bags of 140 lbs | Rice Yield Per Acre (Tons) |
|---------|-------------------|------------------------------|--|----------------------------------|
| 1946-49 | 99,445 | 62,036 | 16.7 | .62 |
| 1950-54 | 128,763 | 74,297 | 15.7 | .58 |
| 1955-59 | 158,614 | 84,240 | 15.0 | .53 |
| 1960-64 | 245,512 | 128,118 | 13.8 | .52 |
| 1965-69 | 298,312 | 139,754 | 11.7 | .47 |
| 1970-74 | 242,910 | 119,357 | 12.1 | .49 |
| 1975-76 | * 275,000 | 135,000 | (13.0) | (.49) |

* estimated

Note: This table was compiled from own calculations from sources below.

1. IBRD, op cit, Statistical Appendix, Table 3
2. Min of Agri, Res & Pl Div, op cit, VI-9-VI-14
3. Min of Economic Dev, Stat Bureau, op cit, Table 1-1.

The reasons for the lagging production of rice lie in three inter-related factors, viz, the transformation of farm production methods from hand to mechanisation, variable weather conditions that affect mechanical efficiency, and a lack of adequate supportive services. Mechanisation, in the form of the agricultural tractor to prepare land for sowing and the combine harvester for reaping, was encouraged and quickly gained almost total appeal. The tractor replaced the oxen and made easy the arduous task of land preparation²⁴. It made possible seed broadcasting which improved the farmer's seed sowing capacity many times over the traditional 'transplant' method²⁵. The combine harvester had an even greater effect in increasing the farmer's efficiency. It encouraged large scale farming by obviating the constraint of an inelastic supply of labour at crucial sowing and reaping times.

However, the effects of mechanising were not all advantageous. First, as mentioned in Chapter 3 (Section 4), the efficiency of the machines over 'hand methods' resulted in the displacement of the rural labour that depended on seasonal employment²⁶. This, in turn, contributed to rural stagnation and poverty from which many sought to escape by out-migrating. The reduction of nearly a fifth of the total farm holdings between 1962 and 1977 when there should have been an increase due to population increases, suggested that a considerable proportion of the out-migrants were farmers or members of farming households (see Table 23). Secondly, the tractor and the mechanical harvester made the bullock and other 'implements' of 'hand methods' of cultivation obsolete which, in turn, made farmers dependent on the machines²⁷. Formerly, the PPP Government, dubbed by some as the 'rice government', during its reign, provided substantial financial help to farmers by way of providing import and petrol subsidies etc for agricultural machinery. The succeeding regime, however, ended most of this preferential bias, which caused the prices of agricultural machinery to soar in relation to the price of rice. The result of this was that the imports of agricultural machinery plummeted to the extent shown below.

TABLE 24 Imports of Agricultural Machinery 1960-1974

| Year | Total No. of Agricultural Tractors Imported | Total No. of Combine Harvesters Imported |
|---------|---|--|
| 1960-64 | 2743 | 271 |
| 1965-69 | 1342 | 108 |
| 1970-74 | 1281 | 55 |

Sources: 1. IBRD, op cit, Table 27
2. Min of Agric, Res and Pl Div, Table V4.

The reduction in imports of the above machines created an immediate shortage, worsened by the expansion of rice acreage that was in progress, and the fact that the machines had a relatively short life. This was detrimental to the entire industry. Because of the limited duration in which land

preparation, sowing, and harvesting must be done the shortage of tractors, harvesters and other mechanical equipment such as ploughs, water-pumps, spraying equipment etc results in a serious loss of production²⁸. In a good year when 'dry-land' ploughing is possible and there is a rain-free period of at least six weeks at harvest time, between 80-95% of the available rice land is cultivated and reaped. But such 'good' years have been few. For example, in 1964, which was a relatively 'good' year, a total of 394,000 acres were cultivated. From the following year and until 1976, because of early or heavy rains in the crucial planting season, only four times was 80% of this acreage achieved. In two very wet years, i.e. in 1971 and 1972, tractors were restricted to half of their normal operating time, which resulted in the total acreage cultivated in those years being reduced to less than 60% of the 1964 acreage.²⁹ Harvesting operations were equally affected by bad weather. In 1973 'early rains' in the reaping season prevented as much as 36% of the crop from being harvested. Thus 'weather conditions' was a critical factor in rice cultivation. Since 1964 it has exacerbated the shortage of machinery and caused a substantial portion of cultivable land to be abandoned annually.

The third and most important factor is that mechanisation has been found to be directly related to the decline in productivity per acre in the industry. In the late 1940's and early 1950's when land preparation, sowing and reaping facilities were done 'by hand', the average yield of paddy was nearer 16 bags (of 140 lbs) per acre yielding nearly 0.6 tons of rice. With the introduction of mechanisation during the late 1950's and early 1960's, average yield per acre declined immediately and continued to do so until the end of the 1960's when the paddy yield was only 11.7 bags and rice only 0.47 tons³⁰ per acre (see Table 23, Columns 4 and 5). Since the early 1970's the average yield per acre has increased slightly due to the adoption of new higher yielding varieties of seed-paddy by some of the more progressive farmers but, on the whole, it was still very low. As a result most farmers had a very low profit margin. In the case of the small farmer, if his labour costs were to be included in the costs of production, at 1975³¹ prices and at yields below 15 bags of paddy per acre, then his profit per acre

was zero. To the larger farmer low yields per acre meant a low rate of return to investment in machinery or land etc and, to the nation, declining productivity meant lower revenue from declining exports. If mechanisation had been used instead to complement the husbandry practices of the late 1940's then yields per acre would have risen instead of declined. The yields of 16.7 during the late 1940's were still low by the standards of other rice producing countries such as Surinam, or the United States, Taiwan, Japan etc³². It is estimated that Guyanese rice farms have the capacity to increase yields up to an average of 30 bags per acre. If this figure had been achieved then the reaping of an average 275,000 acres in 1976 would have increased the total yield by nearly two and a half times.

The most debilitating of the handicaps the industry faced was that prices of paddy and rice paid to farmers during the last fifteen years have not kept pace with production costs . The Guyana Rice Marketing Corporation was appointed as the sole buying agent for farmers' rice and in this it exercised monopolist powers in the industry, acting as the sole arbiter in fixing rice and paddy prices. In 1953 the Corporation paid a fairly attractive \$6.30 per (140 lbs) bag of paddy. Ten years later during the reign of the PPP Government the price per bag was increased by one dollar or by 16%. With a change of government and a change of development strategy in the mid-1960's, the price of rice declined initially but recovered and gradually increased to \$15.50 per bag in 1975. The costs of production in the meantime had been rising rapidly and had outstripped increases in the price of paddy. In 1962 the average cost of producing one bag of paddy was \$3.92 and by 1975 it had risen to \$13.42. Comparing prices with costs over the 1962-75 period, prices rose by only 112% while costs rose by 242% or by more than twice the increase in price (see Table below).

TABLE 25 (A) Prices and Cost of Paddy Production 1953-1975 (G\$)

| Year | Paddy Prices (Bags of 140 lbs) | Production Cost per Bag | Percentage Increase/ Decrease in Prices | Percentage Increase in Cost of Production |
|------|--------------------------------------|-------------------------------|--|--|
| 1953 | \$ 6.30 | - | - | |
| 1962 | 7.30 | 3.92 | +16 | - |
| 1966 | 6.30 | - | -16 | |
| 1970 | 6.80 | - | + 8 | |
| 1972 | 8.41 | - | +24 | |
| 1975 | 15.50 | 13.42 | +84 | 242 |

(B) Cost of Agricultural Machinery (G\$)

| | 1962 | 1975 | (1977) |
|------------------------------|--------|--------|-----------|
| * Cost of Small Farm Tractor | 3,800 | 14,000 | (16,571) |
| ** Cost of Combine Harvester | 27,000 | 74,000 | (107,412) |
| Plough 3-disc | - | 2,625 | (2,852) |

* 35-45 hp Massey Fergusson Tractor

** Average 12 feet cutting 'header'

Sources: A 1. IBRD, op cit, Table 17
2. Min of Agriculture, R & P Div, op cit, p.VI-15
3. Rice Producers Association (pamphlet)

B 1. IBRD, op cit, Table 27
2. Min of Agriculture, R & P Div, op cit, p.III-5
3. Ibid Quarterly Digest, Jan-Mar 1977, p.29.

This vast increase in the costs of production was due mainly to the increased charges of mechanised operations, i.e. land preparation, reaping etc, and this in turn was due to the phenomenal increases in the cost of mechanical equipment and fuel costs. The effect of the high cost was that profits from rice farming activities declined precipitously. In 1962, a small farmer, not owning a tractor, had an average net profit of about \$47 per acre if he did not include his labour costs as part of the total costs. In

1975, due to increasing production costs and declining productivity, the same farmer was only able to achieve a profit of \$27 per acre. Since he did not own a tractor, in years of adverse weather conditions a situation of small profits was easily converted into sizeable losses.

But not all farmers made losses. Tractor owners, who usually owned or operated on medium-sized farms, made reasonable profits. By virtue of owning a tractor the farmer was able to reduce his mechanical costs by approximately 60%. More important, he was able to perform the essential operations better and in 'season' and so obtain a yield that was, on average, between 30-50% higher than farmers who did not own a tractor. Adverse weather affected him least. He was able to reduce his capital overheads by double cropping and recoup his mechanical costs by hiring his equipment to other farmers. Not deducting for maintenance costs of machinery etc, the tractor-owner farmers made a gross profit of between \$90-140 per acre, which was considerably higher than the small farmer, who at most made less than 50 dollars. The large farmers, i.e. those operating on more than 50 acres, also made reasonable profits, not through intensive cultivation but rather through economies of scale.

The profit level of the tractor owners and large farmers place them in a strong economic position in relation to small farmers. As costs tend to move away from prices the latter become increasingly marginalised. The chances of their owning farm machinery or increasing the size of their holdings are virtually non-existent since credit institutions tend to favour the larger and more efficient farmers. Hence, their dependence on larger farmers for machine hiring and on various money lenders to pay for such services, increases³³. For many the vice of the money-lender, who is in many cases a tractor owner or landlord, tightens slowly putting the unfortunate farmer into a parlous situation where his land is, in time, usurped by the creditor and he is forced into a hand-to-mouth existence. Alternatively, he may become a share-cropper with a tractor-owner, or if sufficiently discouraged with farming he may sell his holding or give up his tenancy. If the former occurs then it is most likely that the large farmer or

medium-sized tractor-owner farmer acquires his plot. A continuation of this trend makes the medium-sized into large farmers who, since their need for land is now less acute, farm less intensively. It may also encourage large landowners to grow yet larger and become landlords. In each case land shifts from intensive to less intensive cultivation.

But despite the fact that some farmers, i.e. tractor owners and large operators, had a reasonable profit level, their total farm earnings were wholly inadequate to meet living and other costs. Living costs tend to rise with public sector wages. At 1976 wages and prices, the basic or minimum (annual) earnings of a public sector worker were equivalent to the profits obtained from a parcel of between 35 and 50 acres in an average year of production. This meant that more than 75% of all farmers earned approximately the same or less than the lowest paid public sector worker. This situation, continued over a number of years, has resulted in a gradual depression in the industry. The present lack of real incentives to produce coupled with problems of inadequate drainage and irrigation, shortages of machines and vital supplies, high transport charges, and depressing rural conditions have significantly reduced the productive capacity of the industry. Unless this situation is reversed the full employment and productive potential will not be achieved. Farmers will grow poorer and become less productive, lowering the supply of food and export revenue to the national coffers.

(iv) Other Food Crop Production

Although the production of a number of food crops has increased appreciably over recent years, exports of some traditional commodities such as plantains, cocoa and coffee beans etc have dwindled to insignificance. Not only were exports affected by the slow development of canning, packing and storage facilities, but the local market was characterised by a situation of gluts and shortages. Formerly, the shortages were made up by imports, but after the policy of import restriction was instituted the shortages were more common. Prices rose as a result but were not sufficiently high to

offset high costs and to overcome the constraints of fluctuating weather conditions and avaricious middle-men. Thus, a situation of chronic shortages existed with fertile farmland remaining under-utilised or un-utilised and farmers languishing in idleness.

(v) Livestock Production

The actual production figures for livestock and products since 1965 make much of the widely publicised achievements of near self-sufficiency in food by the government a hollow vaunt. Between 1965 and 1975, while the population increased by approximately 23%, the production of beef actually declined by 17%. Pork and poultry production however, showed a marked improvement, but the production of milk (fresh), which was always notoriously low, slumped further. (See table on Indices of Production.) The result of low production was that the per capita consumption of fresh meat, eggs and milk was incredulously low taking into consideration that Guyana is primarily an agricultural country. In 1975 the consumption of fresh beef was a meagre 3½ ounces per person per week. On average less than one egg and less than ½ pint of milk was consumed per week.

TABLE 26 (A) Livestock Production 1965, 1970, 1975

| Product | Unit | 1965 | 1970 | 1975 |
|----------------------|--------|------|------|------|
| Beef (fresh) | Mn lbs | 10.2 | 8.8 | 8.5 |
| Pork " | " | 1.4 | 3.3 | 3.5 |
| Mutton & Goat " | " | .08 | .1 | .1 |
| Poultry | " | - | 7.5 | 17.0 |
| Eggs | No | 17.9 | 24.2 | 33.9 |
| Milk (fresh) | Gals | 4.2 | 4.3 | *2.5 |

* 1974 production

(B) /

TABLE 26 (cont)

(B) Per Capita Consumption of Meat, Milk and Eggs 1975

| Product | Per Capita Consumption | Per Capita Consumption per Week |
|--------------------|---------------------------|---------------------------------------|
| Beef (fresh) | 11.06 lbs | .22 lbs |
| Pork " | 4.55 " | .09 " |
| Mutton & Goat " | .13 " | - |
| Poultry | 22.12 " | .43 " |
| Total Meat | 37.86 " | .72 " |
| Milk (fresh) | 3.25 gals | .06 ($\frac{1}{2}$ pint) |
| Eggs (No.) | 44.00 | .8 |

Sources: (A) 1. Min of Agriculture, R & P Div, op cit
2. World Bank Mission to Guyana, Jan 1977, Min of
Economic Dev, Georgetown
3. IBRD, op cit, Appendix, Tables 5 and 6

(B) Per Capita consumption calculated from the above sources.

Estimated Population 1975: 768,607

The usual production picture presented above reflects clearly on the incidence and level of malnutrition in the country³⁴. Such a situation has come about due to the lack of foresight and adequate planning. Along the coast much of the land that was used as 'common' cattle pasture was absorbed into the rice expansion schemes with little provision made to develop alternative 'pastures'³⁵. There was also a marked lack of sensitivity in restricting the importation of fresh and preserved meat. The abrupt restriction resulted in the running-down of the cattle herd as local supplies strived to meet demand. Incentives to increase production were inadequate for overcoming the constraints that ranchers, small owners and dairy farmers were faced with. One development that is worthy of mention was that, to complement the inadequacy and absence of 'pasture lands', the Government increased the fees for impounded strays by 900%. This had the

effect of bringing to an end small scale cattle-rearing, depriving many of a means of supplementing meagre farm incomes through the periodic sale of a bullock and creating an acute shortage, and a virtual absence, of fresh milk in many rural areas.

Apart from specific handicaps, a number of general institutional and non-institutional factors have contributed to the decline of agricultural production. The foremost among these is inadequate marketing organisation. Many areas have no marketing facilities, which means that farmers are powerless to prevent their exploitation by middlemen. Where formal marketing arrangements are available, the buying price always lags woefully behind the costs³⁶. Further, the Government has instituted retail price ceilings on some of farmers' produce, preventing farmers from relating costs to prices. Insufficient and wrongly-oriented extension services are two other handicaps to production. The extension services on the whole tend to be isolated and operate in isolation from the farming community. In many cases their emphasis seems to be on promoting trifling aspects of crop science etc rather than on devoting their concentrated energies to bolstering failing production of the major commodities on which their and the nation's survival depend.

Another factor is that there pervades a general air of stagnation and depression in the industry. Farmers feel very much maligned by the workings of the agricultural and national development policies that are seen to have perpetrated the above conditions in the first place, and to have continued to deepen it.

The anti-government feelings and distrust that many farmers harbour proves to be a considerable obstacle towards an improvement in agricultural production. Government-set production targets are usually scoffed at by farmers instead of presenting a challenge to them whereas, if responded to, can only result in betterment for themselves and to the nation. Finally, the stagnation in agriculture invariably signifies stagnation in the rural environment as both tend to go hand-in-hand. The lack or inadequacy of basic amenities and services that are regarded as necessary for 'comfortable

rural life', even by Third World standards, serves as the final disincentive to farming and rural living. The out-migration that follows creates an impact whereby it accelerates the decline in agriculture and rural production. Hence, less food is produced, which intensifies the shortages, less is available for export, and so less is earned by the nation to buy its way out of shortages.

In summary, the main causes of decline lie in the failure to optimise the use of the country's abundant rural resources. Except in the bauxite industry, the failure of the main export enterprises to achieve and maintain a high level of production was (and is) due to a number of problems that a commitment to their rural and national development programmes by the Governments of the past two decades could have resolved. Since this was not so, agriculture and many rural areas have become very depressed with substantial out-migration occurring which, on one hand, increases urban problems of unemployment, congestion etc, and on the other, increases the depression. In a wider perspective the out-migration of rural individuals represents a loss of wealth-creating potential to the nation.

4. The Need to Arrest Rural-Urban Migration

In view of the ill effects of migration to rural and national development in Guyana it is imperative that immediate and drastic steps are taken to arrest its rate. The need for such action is becoming more acute as the Developed World on which Guyana depends for market and technology experiences inflation and recession, the effects of which are passed on to her. Guyana is not alone in this situation. Most of the Developing Countries that experience a high rate of rural-urban migration are in a similar position.

In these countries three main factors operate to keep the majority of their population in varying degrees of poverty and to fuel a continuing stream of rural-to-urban migration. The first of these is that these countries experience a rapid growth of their population. In many cases this growth exceeds the

pace of increase in food supplies. Aggravating the situation is that natural resources in these countries tend to be limited or relatively undeveloped. Old traditions that are usually a dominant feature of rural life tend to be a handicap to progress³⁷.

The second main factor is that in nearly all of the poor Developing Countries democracy or Socialism are hollow phrases³⁸. In each a small minority (of elites) uses whatever means are necessary to retain political or economic power. The masses are manipulated and exploited to perpetuate the social and economic position of this group. The so-called more articulate middle classes are either powerless or seem to be content with a few privileges to maintain a system that exploits and subjugates the majority of the less able population.

Thirdly, the content and direction of development planning that these countries have been pursuing seems to be not very relevant to their needs. As in the case of Africa, Guy Hunter (1973) shows that the entire philosophy of development was wrong. In the countries of Colonial experience the division of the society into a modern and traditional sector with the hope that the modern will draw surplus labour from the other was unfounded for two main reasons. One was that education which was to provide trained manpower for government and the modern sector oversupplied such personnel. The other was that the modern sector, which was to absorb this labour force, could not do so because it was based on high technology and had a small market and so could not expand rapidly³⁹.

Also, because of their pro-industrial approach to development, most of these countries failed to develop agriculture sufficiently⁴⁰. According to Lipton (1977) the attitude to agriculture, which provided food, foreign exchange and was the main source of livelihood for the majority of the population, was one of "dormancy". In the simplest of terms this is a highly irrational strategy of development. What is even more tragic is that the limited resources that are usually available in these countries for the agricultural sector are inefficiently utilised. Because the 'Status-Quo' usually propose, control and administer agricultural spending, the direction

of the spending is usually in their self interest (Jacoby, 1971). In nearly all cases it is the larger farmers/landowners who are the main beneficiaries of agricultural development⁴¹. Except in the few Socialist countries, the various ill-planned, incomplete and hastily conducted land and tenancy reforms serve to consolidate their social and economic position rather than doing the opposite. (cf. Dorner, 1973; Jacoby, 1971; Griffin, 1974; Ladejinsky, 1977). For obvious reasons, large farmers have an easier access to credit and they tend to benefit most from scientific progress in agriculture⁴². A significant disadvantage of this is that the adoption of sensitive high-yielding seed varieties leads to increasing mechanisation which contributes to the increased poverty and displacement of the local labour force (Gotsch, 1971; Thiesenhusen, 1973; Myrdal, 1970).

A final observation is that, as a result of continuing urban bias in employment opportunities, education facilities and other basic social and welfare services, rural areas are becoming progressively underdeveloped. This trend is not new yet most governments seem oblivious to it or to its effects of increasing rural-urban migration, urban unemployment and stagnation. In cases where it has been recognised as a handicap to development there seems to be no clear thinking as to how to redress the situation. According to Griffin (1974) these "reformist" governments tend to "vacillate" in their choice of policies.

5. Policies to Arrest Rural-Urban Migration in Guyana

In view of the prevailing rural conditions, agrarian structure and the rate and consequences of migration in Guyana, it is suggested that a four-pronged approach be taken to remove the disparities existing between rural and urban areas and to modify other factors stimulating the high rural outflow. These four approaches are:

A: The reorganisation of agriculture through a comprehensive land and tenancy reform supported by the necessary supplemental policies;

- B: The provision of increased rural employment opportunities in the form of light industries and processing of agricultural products;
- C: An improvement in the level of rural services;
- D: General supportive policies including a clear education policy, i.e. adjusting the education curricula to suit local needs, a population and migration policy, urban wage and employment policies, etc.

A: The Reorganisation of Agriculture

By the reorganisation of agriculture is meant an integrated programme of measures designed to eliminate obstacles to economic and social development arising out of agriculture. Some of these measures are: the provision of opportunities for ownership, means of promoting the security and improving the conditions of tenure, the organisation of farms of economic size, land consolidation, the organisation of farm machinery services, measures to promote the equitable use of water supplies, extension of credit facilities and reduction of indebtedness, and a fiscal policy such as tax measures to promote more intensive land utilisation and land distribution.

1. Planning and Scale of the Reform

- (i) Although there is a great urgency for a reorganisation in agriculture, careful planning should be undertaken before steps are taken to institute the reforms. It is essential that planning be a continuing activity with a constant feedback, and it must be dynamic with the ability to adjust to new information.
- (ii) A data base needs to be compiled. To ascertain an accurate situation of land and its utilisation in the country a detailed survey of land resources and agricultural practices is necessary. Information needs to be obtained on: the areal extent of land resources and its physical properties, ownership by nature of title, conditions of tenancy in cases where land is rented, utilisation of land, and fragmentation of it. Also farming profiles need to be built. Information is needed on the

characteristics of the practising farmer and his household, the level of farmers' education and experience, crop type, regimen of production, yields, livestock, farm implements, drainage and irrigation facilities, access to credit, income level and sources of income, constraints to production and propensity to innovate, etc.

- (iii) For the reform to be successful it should be comprehensive and should encompass the objectives set out in the definition given. It should, if possible, be conducted throughout the country simultaneously. However, in the case of limited technical manpower or financial resources, it may be phased with necessary measures taken to prevent malpractices or undue benefits because of this.

2. The Reform

The main components of the reform are:

- (i) Land expropriation, resumption and redistribution.

All unutilised land held under freehold title should be expropriated for redistribution. Where such lands are State lands leased for cultivation or related they should be resumed by the State for redistribution to those (farmers) whose need for land is greater. In each case appropriate compensation should be made to the owner/leasee for the expropriation/resumption of their land.

Large holdings that are under-utilised should also be expropriated for redistribution but allowing for the landowner/operator to retain an adequate acreage which he can farm more intensively.

To prevent large landlords from employing 'underhand' methods to retain possession of their land a ceiling on land ownership is suggested. However there should be no rigid fixation of this ceiling. The efficient farmer should be allowed to expand his farming enterprises but where land is in short supply preference on the limited supplies should be given to needy small farmers.

Also, adequate measures should be taken to prevent landlords from

evicting their tenants and becoming cultivators themselves in order to benefit from the improved agricultural conditions that the reform brings about - as occurred in many areas where reforms were improperly instituted.

To complement these measures in providing 'land to the tiller' it is suggested that the extensive fertile coastal backlands should be brought into cultivation. There is an estimated 1.2 million acres or $1\frac{1}{4}$ times the entire cultivated acreage. With the provision of basic drainage and irrigation infrastructure much of this land can be brought into cultivation. If this is so then even deducting for the sugar estates lands there would be an acreage of over 50 acres for each of the country's 35,000 farmers.

(ii) Compensation.

Large landowners should be compensated on the basis of some formula which would recognise whatever contribution they have made towards the development of the land.

(iii) Land Consolidation.

There should be a policy of land consolidation of the small fragmented holdings presently under cultivation. Small farmers should be encouraged to take up economic-sized holdings made available through the division of large holdings and distribution of State lands.

(iv) Land Sizes.

It is not proposed to specify a minimum size of holdings. Rather they should be economic-sized. This depends on factors such as soil type, cultivation practices, access to markets, drainage and irrigation facilities, etc.

(v) Selection of Farmers.

Farmers should be selected with the utmost care so as to ensure that scarce land resources are available to those who are committed to use the land to their and the nation's benefit. Care in selecting farmers, however, should not result in the displacement of the population from rural areas.

(vi) Land Titles.

It should be the policy that titles to land shall be made as quickly as possible to holders of land and that it should be recognised as a collateral in the raising of farm credit etc.

(vii) Land Tax.

It is suggested that a land tax be levied on all lands depending on the facilities provided and the potential of the land. This would serve to intensify the use of the resource.

(viii) Tenancy Regulations.

There should be a comprehensive tenancy reform with the aims of providing security of tenure to tenants and protecting landlords. These regulations should also prevent tenant exploitation and create conditions that eventually make them owners of the land they till.

Under the reforms clear and unambiguous regulations governing the level of rents, responsibilities of tenants and landlords, the conditions under which the tenant can be evicted and land resumed, the level of and terms of compensation that is payable to either party for development to land and property. Generally the regulations aim at harmonisation of relations between landlords and tenants to their mutual benefit.

3. Policies Supporting the Reform

(i) Credit Facilities.

It is recommended that adequate credit facilities are made available to farmers with the minimum of government and other procedural 'red tape'. One possibility is that the Local Village Council be the disbursing officer of farm credit. Land titles and crop in field should be regarded as acceptable collateral for such credit. This would prevent poor farmers from being exploited by rapacious local moneylenders etc.

(ii) The Extension Service.

A reform is only as good as its back-up services. It is recommended that there should be a change in the direction and orientation of extension

services. There should be less manpower and financial resources devoted to research and related activities which can be obtained cheaply from the more developed countries. The service should be less centralised. The strong urban orientation of most of its personnel should be discouraged. In general the service should shed its 'white collar' approach to agriculture and work closely with farmers.

This institution should also be instrumental in educating farmers and creating conditions in which they are amenable to change in their self-interest.

(iii) Agricultural Policy.

There is a need for a clear and meaningful agricultural policy that is free from generalisations, aspirations or rhetoric. On this aspect of the reform the existing government policy of development through increases in productivity and total production does not necessarily mean that agriculture is being developed. The policy should extend to cater for an overall improvement in the livelihood of the farming and general rural population since agriculture is the main rural activity.

The policy of agricultural diversification is laudable but there must be adequate incentives to stimulate such a movement.

There should also be a clear-cut policy on the role of mechanisation in Guyanese agriculture. It is the conviction here that mechanisation in the form of tractors, harvesters and mechanised mills will be a permanent feature. However, if small and medium sized tractors are re-imported instead of large and expensive models that are presently imported, many medium sized farmers will be able to acquire their own machinery which will augur well for increased production and a tendency to innovate and diversify.

To alleviate the present crop-time scarcity of agricultural machines it is recommended that machinery pools be organised by the Rice Producers, Agriculture Department or Local Village Councils and managed with minimum or, preferably, no State involvement.

(iv) Factor Price Equalisation.

This is an important factor in ensuring that the majority of farmers, their dependents, farm-workers and others have a comparable and adequate income (compared with urban workers) from their farming and related activities.

To ensure that this is so agricultural products should not suffer from unequal terms of trade in the economy. Prices of produce should be related to the costs of production and increases in living costs etc. It should not be the policy of government marketing agencies to strive to show a profit at the expense of the farmer by way of undervaluing his labour. Rather, the policy should be one of high prices which will serve to increase the productivity of land and labour and stimulate expansion, diversification and general development of agriculture.

(v) Political Biases and Patronage.

There should be an end to the system of patronage, racial and political biases in the industry.

4. Administration of the Reform

Administration is the crux of any land reform program. If a program is to be successful then it means that its administration has to exhibit several desirable characteristics. First, it must not be servile to bureaucracy and officialdom. It has to be capable, well-informed and receptive to changes as advocated by its feedback mechanisms. Most of all, it must be impartial, uncorrupted, and show a genuine commitment to the development of agriculture and to improving the livelihood of those involved in agriculture.

In Guyana, it is suggested that the land and tenancy reforms should, at the national level, be conducted by a small semi-autonomous body operating with clear terms-of-reference and supported by the necessary legal and other instruments.

This body should not be comprised of 'technocrats' who are likely to have urban backgrounds, middle-to-upper class values, and a limited

practical knowledge of farming and rural conditions, nor should it be comprised of academicians but of persons with experience and integrity who are not open to manipulation and corruption.

At the local level it may be conducted by the Local Village Councils. Where this is unsuitable a democratically selected (local) group of farmers should be the agent of reform. It is essential at this level that an integration of the various services and resources occurs to accelerate the transformation. For this reason the Local Village Councils seem to be the more appropriate choice of administration at the local level.

5. Financing the Reform

(i) Compensation for Land.

Land reform can be a very expensive undertaking especially if large landowners are to be compensated for land that is expropriated for redistribution. Also, if new lands are to be redistributed then the initial costs of infrastructure are likely to be high.

In Guyana's situation of scarce resources the policy should be that landlords are compensated by the issuing of Government Bonds due to mature within a 'few' years by which time the invigorated rural and national economy will easily be able to honour its financial commitments. In this way the reform can progress smoothly without adding to the financial crisis which the central government and the economy are currently experiencing.

(ii) Financing the Complementary Programs.

It is suggested that much of the finance for these programs (outlined previously) come from Central Government. This does not mean a vast increase in central government spending. It is envisaged that the elimination of many of the archaic and parasitic bureaucratic structures in the institutions related to agricultural development will result in huge savings. The small, efficient and imaginative managements created by the reform will optimise on present and whatever additional financial and manpower resources are available.

(iii) Repayment by Farmers.

It is suggested that the costs of implementing reform and land redistribution should not be passed on directly to farmers benefitting from the reform. Rather, the State would benefit or recoup its expenditure from the general Land Tax and from taxes from the increased consumption of goods and services by the farming community.

For individual liabilities such as individual loans, credits, etc terms of repayment should be lenient and be related to weather conditions, crop yields, profitability etc.

B: Rural Employment Opportunities

It is common logic that the surest way to lessen rapid rural-urban migration is to provide opportunities for employment at favourable wages in rural areas.

1. Employment Creation

- (i) Increased rural employment can be provided by the setting up of light and 'screw-driver' industries in areas of high unemployment.
- (ii) The processing of agricultural products (in rural areas) should be developed to become a major industry and source of rural employment.
- (iii) A decentralisation of Government Departments related to agriculture and rural services should occur to increase manpower and financial efficiency and at the same time provide some employment.
- (iv) A system of industrial decentralisation should be actively pursued to favour rural population concentrations instead of Georgetown, where the level of employment is considerably lower than in rural areas.

2. Wages Policy

- (i) There should be a movement towards the standardisation of agricultural wages to protect the farm worker from being exploited.

- (ii) Wages on farms and in rural employment ventures should compare favourably with urban wages given workers' experience and skills. (High or reasonably high wages in agriculture should not result in unemployment among farm-workers, in increasing mechanisation or a fall in output due to less labour employed because the value of agricultural output would be increased to its true value.)

C: An Improvement in Rural Services

The third policy of the strategy to arrest rapid urban migration is the improvement in the level of rural services and basic utilities.

It is urgently required to provide the basic utilities of electricity, pure water-supply and transportation to rural areas where it is absent or improvement in its supply where it is poor.

The provision of social services such as housing, education and health facilities should also be improved. Unless this is so the disparity between urban and rural areas in living conditions will serve to stimulate out-migration from rural areas.

D: Supplementary Policies to Arrest Migration

1. The Need to Restructure the Education Curricula

There is an urgent need to restructure the education curricula to suit local needs. The education reforms of the past two decades have not gone far enough to change attitudes and skills. To achieve this it is urgently recommended that the curricula be radically changed with a strong emphasis on science subjects and technical education instead of 'proliferating' the arts subjects and burdening the economy by preferential employment of unproductive personnel.

Most important is that the 'bastions of Colonialism', i.e. aged administrators that influence policy making and staff all important levels in education (teaching) should be replaced by persons of a more progressive

outlook and who are more cognisant of the needs of the developing Guyanese Society.

Unless this is speedily accomplished all the institutions of education in Guyana will continue to produce graduates destined for urban areas.

2. The Need for a Population and Migration Policy

A clear policy on population, in which fertility and migration (both internal and international) are considered, has not been enunciated for Guyana as yet. Because of population growth and other factors dealt with throughout this thesis, internal migration from rural to urban areas is rapid. International out-migration too has been rapid for nearly the same reasons as internal. It is estimated that a third of the country's natural increase is lost through international migration. What is significant about this is that a great portion of this outflow is comprised of the highly educated and skilled Guyanese, which represents more of a 'brain drain' than a 'safety valve'.

In order to control the internal and this international outflow a population policy that includes family planning etc and a sharply delineated migration policy are needed. It is not advocated that there should be a restriction of free mobility but that it should be controlled to conserve resources for development.

3. A Reduction of Urban-Rural Disparities

It is strongly advocated that the urban bias in national development should be changed. Rural areas should not be disadvantaged. It is the opinion here that many of the urban wage increases are unwarranted and are usually made so as to conserve the status-quo of the urban employed. If such increases are necessary, policy makers i.e. politicians etc should ensure that rural areas and the agricultural labour force are similarly rewarded. If not then the expectation of high urban incomes will continually draw both the rural unemployed and the employed.

5. Conclusion

Many distressing experiences in the Developing World have shown that land reform is by no means a panacea as it was thought to be. As mentioned, hastily planned and incomplete reforms have resulted in the rural poor becoming poorer and the disparities between urban and rural areas becoming wider. For a reform to be successful the essential back-up policies and services need to be implemented simultaneously with the redistribution of land and the regularising of tenancy arrangements.

In the case of Guyana land redistribution should be seen as the 'pillar' around which integrated rural development should be approached. The present Government, in keeping with its Socialist Philosophy, has often enunciated a policy of "Land to the Tiller", but except for a few specific cases, the policy seems more of a statement of intent than action. In terms of development expenditure the urban bias, which was a feature of the country's Colonial past, is still strong and seems to be growing stronger while the rural resource centre is being emasculated.

It is the firm conviction here that, unless there is a reversal of this trend and a genuine commitment to rural development, through a comprehensive land reform the present decline in the economy will continue. Rural areas will become more impoverished and will experience a greater migrant out-flow, which will only aggravate the already high urban unemployment and tax the limited urban resources. On the other hand, if such a development is to take place, then agriculture will be developed and an invigorated rural sector will release and provide the resources for economic recovery and rapid growth and development.

In these conditions narrowing urban-rural disparities will bring about a reduction in the rate of urban migration. It is even conceivable that migration will be more beneficial than harmful to both sending and receiving areas.

FOOTNOTES

- 1 The term 'migration' is used to mean both rural-urban and inter-urban movements.
- 2 There have been very few attempts towards a holistic approach to the study of migration. Analysts of migration tend to enter into indept investigations of complex issues using sophisticated tools without first having adequate references with the various disciplines that concern themselves with migration.
- 3 In a world of harsh economic reality and 'unending' struggle for betterment this approach seems to be the most appropriate in explaining migrant behaviour.
- 4 This definition was obtained from the United Nations Yearbook of Population, 1970.
- 5 Political factors, as motives for migration, are powerful but their momentum is usually quickly spent. Economic reasons, on the other hand, tend to cause a steady flow in a more or less fixed channel.
- 6 For a detailed account of the major inter-continental flows see for instance Brindley Thomas, Migration and Economic Development, Cambridge Univ Press, 1954; G Beijer, "Modern Patterns of International Migratory Movements", in J A Jackson (ed), Migration, Cambridge Univ Press, 1969, pp 3-59; W D Borrie, The Growth and Control of World Population, London, Weidenfield and Nicolson, 1970, pp 85-127.
- 7 For a full account of these flows and their magnitudes see Hugh Clont, "Rural Urban Migration in Western Europe", in J Salt and H Clont (eds), Migration in Post War Europe, Oxford Univ Press, 1976, pp 30-51.
- 8 For a good account of inter-community (EEC) mobility see W R Bohning, The Migration of Workers in the United Kingdom and the European Community, Oxford Univ Press, 1972.
- 9 For a concise account of Latin American emigration see W D Borrie, op cit, pp 179-197.
- 10 A number of researchers have attested to this. See for example Alan Gilbert, Latin American Development, Penguin Books, Middlesex, 1974; J E Perlman, The Myth of Marginality, Urban Poverty and Politics in Rio de Janeiro, Univ of California Press, 1976, pp 4-5; World Bank, Urbanisation Sector Working Paper, June 1972, Index I.

- 11 During the last twenty years the annual rate of total population growth was 2.9% while the urban rate of growth during the same period was 4.4%. World Bank, op cit, Annex I, Table 1.
- 12 For instance urban areas.
- 13 See C Geertz, Agricultural Involution - The Process of Ecological Change in Indonesia, Berkeley, 1963. It was found that the islanders in Java and Bali, two of the most densely populated places on earth, preferred to intensify production on their plots of land rather than to migrate to Jakarta.
- 14 See McConnell et al, Migration From Rural Areas - The Evidence From Village Studies, Oxford Univ Press, 1976, pp 8-9.
- 15 This is so because in the shift to cash cropping, usually the cultivated crop is not the staple food crop. Any extraneous condition that leads to crop failure means that the cash cropper has to migrate since it is not possible for him to revert to his former subsistence state, and because he has grown dependent on money for his wants.
- 16 See for instance K C Abercrombie, "Agricultural Mechanisation and Employment in Latin America", in Mechanisation and Employment in Agriculture - Case Studies From Four Continents, ILO, Geneva, 1974; K N Raj, "Mechanisation of Agriculture in India and Sri Lanka", in Mechanisation and Employment in Agriculture, ILO, Geneva, 1973. See also C H Gotsch, "Tractor Mechanisation and Rural Development in Pakistan", op cit, 1973.
- 17 McConnell et al shows that in a study in Mysore (India) T S Epstein found that the poorest caste did not seek work in towns, although they would have liked to, because they lacked links with prominent people in town and faced severe competition from higher caste men who were preferred. McConnell, 1976, op cit, p 20. Similarly, in Guyana and Surinam the poorest villagers have lower than average education and few urban contacts. Because these can hardly expect better than manual jobs there they tend to have low rates of out-migration.
- 18 This feature seems to be very evident in Guyana. I suspect it might be the same in many other areas where society is less stratified and segregated (i.e. where caste etc. does not exist).
- 19 Proximity in this sense is not taken to mean distance in terms of miles only. Where ribbon type settlement occurs small nodes at some distance may have a greater degree of development and more urban contact than areas that are closer, in terms of miles, to the urban centre. Beals, Levy and Moses have made the same observation. See R E Beals, M B Levy and L N Moses, "Rationality and Migration in Ghana", in The Review of Economics and Statistics, Vol 49, No 1, Feb 1967, p 481.

- 20 According to E G Ravenstein the majority of migrants travel short distances. Ravenstein, "The Laws of Migration", in The Journal of the Royal Statistical Society, London, June 1885, pp 167-227.
- 21 It should be noted that when Ravenstein formulated his hypotheses the system of transport was far less developed than it is now. In the context of limited transport his distance hypothesis might hold reasonably well.
- 22 This is because the migration decision was a family decision in the first place.
- 23 In cases where chain-migration occurs a greater proportion of migrants move directly from their place of origin to an urban destination. Even in the absence of step-migration long distance, or direct rural-to-urban movement, may occur if there are only a few urban areas in a region or country. McConnell et al, 1976, op cit, notes a number of cases where this might happen, pp 82-82. For an exposition of intervening hypotheses as defined by Lee and Stouffer see E S Lee, "A Theory of Migration", in Demography, No 1, pp 47-57; S A Stouffer, "Intervening Opportunities: A Theory Relating Mobility and Distance", in American Sociological Review, Dec 1940, 5 (6).
- 24 The studies referred to are J Lopreato, "Peasants No More", Pub San Francisco, 1967, pp 216-217; R K Lewis, "Hadchite: A Study of Emigration in a Lebanese Village", Unpub thesis, Columbia Univ, 1967, p 240; and E Dussanze, "L'Emigration Sarakollaise du Guidimaka ver La France", in S Amin (ed), Modern Migration in Western Africa, Oxford Univ Press, 1974. Paul T Schultz also found that costs of movement in Columbia may dampen the rate of movement from rural to urban areas. See P T Schultz, "Rural Urban Migration in Columbia", in The Review of Economics and Statistics, Vol 53, Feb 1971, No 1, p 161.
- 25 Such 'attributes' are that education broadens the horizons of the individual. It gives a sense of superiority among some over those with lower levels of education; it often changes taste, stimulates new desires and accelerates acculturation and modernisation processes.
- 26 See for instance R H Sabot, Economic Development and Urban Migration in Tanzania 1900-1971, Clarendon Press, Oxford, 1979, pp 105-127; McConnell et al, op cit, pp 61-63; M J Greenwood, "The Determinants of Labour Migration in Egypt", in Journal of Regional Science, Vol 9, No 2, 1969, pp 289-290; G S Sahota, "An Economic Analysis of Internal Migration in Brazil", in The Journal of Political Economy, Vol 76, 1968, pp 234-236; T Paul Schultz, op cit, pp 160-163.
- 27 According to Bairoch, "The inadaptation of education, in both kind and degree to the real needs of the economy is an almost universal problem ... " in the Developing Countries (Bairoch, 1973 : 33). Helen Safa has

taken the same view. According to her, education in Third World countries is geared largely to preparing people for jobs in the relatively small modern sector of the economy. See H I Safa, in The Introduction, in Safa and Du Toit (eds), Migration and Development Implications for Ethnic Identity and Political Conflict, Moulton Publishers, The Hague, 1975, p 7. See also Paul Bairoch, Urban Unemployment in Developing Countries, ILO, 1973.

28 Potential migrants tend to have a reasonable knowledge of employment and other opportunities at their place of origin but their 'information field' in relation to the above declines with distance.

29 To the young the faster tempo of life in urban areas and the variety and anonymity which it offers is an attractive feature, while to the more aged it is generally not.

30 It is considered useful here to present a summary of the Migration Postulates (Laws) of Ravenstein (1885, 1889). The Laws are presented as summarised by Everett Lee. (Single quotation marks denote Ravenstein's own words, see E S Lee, "A Theory of Migration", in J A Jackson (ed), Migration, op cit, pp 282-283.)

(1) Migration and distance:

- (a) 'The great body of our migrants only proceed a short distance' and 'migrants enumerated in a certain center of absorption will grow (less as distance from the center increases)' (1885, pp 198-199)
- (b) 'Migrants proceeding long distances generally go by preference to one of the great centres of commerce and industry' (1885, p 199)

(2) Migration by stages:

- (a) 'There takes place (constantly) a universal shifting or displacement of population, which produces "currents of migration", setting in the direction of the great centres of commerce and industry which absorb migrants' (1885, p 178)
- (b) 'The inhabitants of the country immediately surrounding a town of rapid growth flock to it; the gaps thus left in the rural population are filled up by migrants from more remote districts, until the attractive force of one of our rapidly growing cities makes its influence felt, step by step, to the most remote corner of the kingdom' (1885, p 199)
- (c) 'The process of dispersion is inverse to that of absorption and exhibits similar features' (1885, p 199)

(3) Stream and counterstream: 'Each main current of migration produces a counter current' (1885, p 199)

(4) Urban and rural differences in the propensity to migrate: 'The natives of towns are less migratory than those from rural parts of the country' (1885, p 199)

- (5) Predominance of females among short distance migrants: 'Females appear to predominate among short journey migrants' (1889, p 228)
- (6) Technology and migration: (Migrant streams have a propensity to increase in time due to technological developments)
- (7) Dominance of economic motives: 'Bad or oppressive laws, heavy taxation, an unattractive climate, uncongenial social surroundings, and even compulsion, have all produced and are still producing currents of migration, but none of these currents can compare with that which arises from the desire inherent in most men to "better" themselves in material respects' (1889, p 286)

The following are Everett Lee's hypotheses on the volume of migration, stream and counter stream and migrant characteristics:

The Volume of Migration

1. The volume of migration within a given territory varies with the degree of diversity of areas included in that territory.
2. The volume of migration varies with the diversity of people.
3. The volume of migration is related to the difficulty of surmounting the intervening obstacles.
4. The volume of migration varies with fluctuations in the economy.
5. Unless severe checks are imposed, both volume and the rate of migration tend to increase in time.
6. The volume of migration varies with the state of progress in a country or area.

Stream and Counter-Stream

7. Migration tends to take place within well defined streams.
8. For every major stream a counter stream develops.
9. The efficiency of the stream is high if the major factors in the development of a migration stream were minus factors at origin.
10. The efficiency of a stream and counter stream tends to be low if origin and destination are similar.
11. The efficiency of migration streams will be high if the intervening obstacles are great.
12. The efficiency of a migration stream varies with economic conditions, being high in prosperous times and low in times of depression.

Characteristics of Migrants

13. Migration is selective.
14. Migrants responding primarily to plus factors at destination tend to be positively selected.

15. Migrants responding primarily to minus factors at origin tend to be negatively selected; or, where minus factors are overwhelming to entire population groups, they may not be selected at all.
16. Taking all migrants together, selection tends to be bi-modal.
17. The degree of positive selection increases with the difficulty of the intervening obstacles.
18. The heightened propensity to migrate at certain stages of the life cycle is important in the selection of migrants.
19. The characteristics of migrants tend to be intermediate between the characteristics of the population at origin and the population at the destination.

The above hypotheses were taken from Lee, "A Theory of Migration", in J A Jackson (ed), Migration, op cit, pp 288-296.

31. By this it is meant that labour moves to locations where its monetary and non-monetary returns are highest.
32. Most of the writers along this line tend to present an incomplete and far too generalised analysis as to exactly how the transfer and utilisation of labour contributes to economic development. Kuznets, for example, stresses the critical role of population in development but does not fully take into account the behaviour of people particularly in a situation where natural resources are scarce. Some writers tend to model development after the North American experience which clearly is inappropriate elsewhere. See Simon Kuznets, The Economic Growth of Nations, Cambridge, Mass, Harvard Univ Press, 1971.
33. The push and pull factors are usually ambiguous. The classic case of this is fewer negative and positive factors at origin and destination. Also, the relative intensity or strength of the factors are not given. This may be due to the fact that they are difficult to measure.
34. Urban areas in Developing Countries tend to have a weaker economic base than in the Developed Countries. Also, there is greater regional (rural-urban) inequality - which results in a high income differential that seems to have a tendency to increase in time.
35. Kammeyer and McClendon show that while Lee may have set out to show how the individual makes the decision of whether he should migrate or not, his generalised hypotheses on streams and counter streams tend to lose the effect of individuality. See C W Kammeyer and McClendon, "Some Tests and Comments on Lee's Theory of Migration", in K C W Kammeyer (ed), Population Studies, Rand McNally College Pub Co, Chicago, 1975, 2nd Edition.
36. See Julius Margolis, "Internal Migration: Measurements and Models", in A A Brown and E Neuberger (eds), Internal Migration, A Comparative Perspective, Academic Press, London, 1977, pp 135-143.

37. See W A Lewis, "Economic Development with Unlimited Supplies of Labour", in The Manchester School of Economic and Social Studies, May 1954, pp 139-191 for a description of the original model, and M P Todaro's summary of the Lewis-Fei-Ranis model of development in M P Todaro, Internal Migration in Developing Countries, ILO, Geneva, 1976, pp 21-25.
38. See Todaro, op cit, for some of the criticisms of this model.
39. Most models do not consider benefits beyond those of the migrant's working life.
40. It is the opinion here that household decision making is more appropriate in Developing Countries than the individual decision in migration decision making. The head of the household usually makes the decision, and thus individual rationality is inappropriate.
41. Unfortunately Sjaastad does not say exactly how this could be done. See L A Sjaastad, "Costs and Returns of Human Migration", in The Journal of Political Economy, Vol LXX, Part 2, Oct 1972, pp 80-93.
42. Many modellers do not proceed beyond making the general statement that when employment is finally obtained at destination the high wages compensate for the disadvantages and costs of the initial period of waiting and job search. But costs during the period of job search, if the prospective migrant does not move straight into employment, may be a strong deterrent to migration since he would have to face these costs before he has an opportunity to take advantage of the anticipated higher earnings. According to Rothenberg his 'asset position' is likely to be unusually weak during the period of unemployment. See J Rothenberg, "On the Micro Economics of Internal Migration", in Brown and Neuberger (eds), Internal Migration, op cit, especially pp 198-200.
43. See Note 40.
44. To an extent this nullifies the occurrence of pure rationality in the individual migration decision.
45. Although Todaro catered for the upward shift in the migrants' income streams he did not extend his (the migrant) streams to include the probable income of spouses and children. In his study of migration and adaption in Mexico Kemper shows that the above considerations were part of expected benefits. See R V Kemper, Migration and Adaption, Sage Publications, London, 1977, p 159. For some criticisms on Todaro's model see the Book Review of Todaro's "Internal Migration in Developing Countries: A Review of Theory, Evidence, Methodology and Research Priorities", published by the ILO in 1976, by Henry Rempel in Journal of Economic Literature, Vol XVI, Sept 1978,

pp 1078-1079. For a test of Todaro's model and some criticisms see E M Godfrey, "Economic Variables and Rural-Urban Migration: Some Thoughts on Todaro's Hypothesis", in Journal of Development Studies, Vol 10, No 1, 1973, pp 66-78. In his extensive survey of the recent migration literature Todaro cites Godfrey's study (and test) but does not discuss it. He mentions Barnum and Sabot's (1975) study, "Education, Employment Probabilities and Rural-Urban Migration in Tanzania", as the first really comprehensive and significant test of the Todaro hypothesis. See M P Todaro, op cit, 1976, p 69.

46. Some authors, for example Raoul Prebisch, apply the same arguments which he used to show that international trade disadvantages underdeveloped countries to the internal terms of trade between agriculture and manufactured goods in a country. The same argument is in a number of his works. See for instance United Nations, Economic Commission for Latin America, New York, 1969.
47. Most Governments institute some kind of minimum wage agreement with the intention of improving the livelihood of those who have the lowest incomes. However such agreements rarely go beyond urban areas or Government employment. Since wages of the semi-skilled and those with lower education rise significantly under minimum wage agreements it serves as a powerful incentive for rural persons with the same level of skill and education to migrate. This is quite rational on the part of the potential migrants. Vacancies for engineers at high wages in the city will not arouse the interest of the rural casual labourer, but high wages of Municipal manual workers will encourage him to migrate in the hope of Municipal employment.
48. According to M Blaug, "... there is something about education that makes people unemployable: it raises their aspirations ... it gives them the wrong skills or the wrong attitudes." See M Blaug, Education and Employment, in IBRD Working Paper 160, World Bank, Feb 1975.
49. Wen Lang Li has found that regional convergence occurred in Taiwan. Unfortunately his data is rather old (1895-1945) but nevertheless his findings were that the less developed regions (perfectures) experienced a relative population decline - migration transferred population from populated regions to those of lower density where the rate of industrialisation was highest. See Li, "Internal Migration and Regional Development in Taiwan", in Richmond and Kubat (eds), Internal Migration: The New World and the Third World, Sage Publications, London, 1976.
50. From the survey of Lansing and Morgan (1967) Morrisson records that: Relative to earnings at origin, people who have left rural areas for urban earn more, on the average, than those who remained ... and from the survey of Wertheimer (1970) that five years after moving the migrants have earnings equal to those of ... urban non movers of the

same education, age, race, and sex. See Morrisson, 1977, op cit, pp 66-68.

51. Perlman (1976) emphasises that migrants are not marginalised in urban areas: instead they improve on their occupational levels upon migration. But while this may apply to the rural poor it does not apply to those who come with higher than average education and skills. Often these enter into comparatively lower-status occupations in urban areas.
52. Although many observers emphasise the substandard conditions found in slums and shanti towns it must be remembered that whatever the conditions are there it is often better than where the occupiers have come from.
53. Greenwood contends that wages must fall if there is an outflow of labour. This would be because it implies a redistribution of income. See Greenwood, 1975, op cit, p 416.
54. A good example of this is the case of Guyana. Due to a fall in agricultural production caused, to a good extent, by the withdrawal from the land and a decline in productivity, the country has been having acute foreign exchange shortages which have acted as a bottleneck to development.
55. See Wilbur Zelinski, who says that migration is an essential component of the modernisation process. See W Zelinski, "The Hypothesis of Mobility Transition", in The Geographical Review, No 61, pp 219-249.

NOTES : Chapter Two

1. For the range and extent of mineral and non-mineral resources in Guyana see: United Nations Development Programme and Government of Guyana Urban and Regional Planning Project (URPP) Draft Report 1.C Minerals, Report 1.D Forest Resources, Guyana, 1976; UN/FAO Report on a Soil Survey Project - British Guiana, Soil Reconnaissance Survey Vol I-III, Rome, 1960.
2. For the agricultural and other potentials of the soil resources see UN/FAO Report to the Government of Guyana on Soil Surveys, by soil specialist J Steele, Rome, 1966.
3. See UNDP/Government of Guyana, URPP Report 1.D, op cit.
4. Because of the relative flatness of the coastlands canals are used as a cheap means of transporting sugar canes from fields to the factory.
5. Mainly American competition.
6. A similar strategy to secure labour supplies was used in South Africa. Peasants were covertly forced to become wage earners and once they were in the wage earning system they were imprisoned by it, which, according to Magubane, "perpetuated their exploitability". See Bernard Magubane, "Bantustans and Migrant Labour in the Political Economy of South Africa", in Safa and Du Toit (eds), Migration and Development, op cit (Notes, Ch I).
7. According to Adamson, the growth of the indentured labour force resulted in a decline in wages of the resident populations. It also prevented any form of individual or collective bargaining. See Adamson, Sugar Without Slaves, The Political Economy of British Guiana, 1838-1904, Yale Univ Press, New Haven and London, 1972, pp 119-122.
8. See also G Henry Dalton, History of British Guiana, 2 Vols, Georgetown, 1855; Nath, Dwarka, A History of the Indians in British Guiana, Georgetown, 1950.
9. This was because the sea coast was below the mean high tide and had to be protected by dykes or a 'sea-wall'. Often leaks would occur or parts of the wall was broken and the sea would inundate nearby villages. Flooding from rainfall was also common.
10. This was the obvious reaction to unimproved conditions and the decades of exploitation and abuse that workers faced in the sugar industry. The poor returns from rice cultivation led to feelings of disassociation from the land. Also those who worked on the land were considered lowly or inferior to the office clerk. Because of this it was an inbuilt aspiration

to enter into jobs of an 'office' nature in preference to one of a 'field' nature.

11. For many the schooling of children was given a high priority. Often education expenditure eroded deeply into family income.
12. The form and content of the Education System in Guyana was clearly not oriented towards the needs of the country. The curriculum of primary and secondary schools was limited to the three 'Rs' and the 'arts' and 'classics' in secondary schools. As such the education system was only geared to producing clerks and teachers, instead of educated farmers, skilled technicians etc. Education was thus instrumental in causing out-migration by training individuals for employment which they could only get in urban areas.
13. During the entire Colonialist period the Government did not make any real attempt to prevent sugar estates from exploiting workers. Wages were low even when profits were high. If wages during the 1953-60 period in the sugar industry were to be examined it would be observed that the value of labour productivity had risen by 211%, money wage rates increased by only 57%, and real wage rates by only 13%. See Havelock Brewster, "The Pattern of Change in Wages, Prices and Productivity in British Guiana, 1948-1962", in Social and Economic Studies, Vol 18, No 2, June 1969, pp 107-136.
14. See F Sukdeo, Malaria Eradication and Population Growth in Guyana, Univ of Guyana, mimeographed, March 1973, pp 7-14.
15. Ibid, pp 15-16.
16. An examination of Table 1, presented in the text, shows that numerically males exceeded females until 1931. (This was because immigration during the indentureship period 1838-1918 was male-selective.) However real sex equalisation in terms of equal numbers above 15 years of age did not occur until the mid-1940's.
17. In most Developing Countries, according to Schultz, children at a very early age become potentially capable of contributing towards family resources. However, if the means by which children contributed no longer exist, i.e. if mechanisation removes the need for children's labour contribution where they do make such a contribution, then they are redundant and constitute a near total burden to parents. In the case of Guyana mechanisation is substituted for labour, which tends to reduce the contribution children can make towards their upkeep. In addition, since most are not needed on the land, a higher investment in education is needed to prepare them for alternative employment. Thus a reasonably large number of children in a family means that a large portion of family expenditure would have to be diverted to educate and bring up children. See T Paul Schultz, "An Economic Perspective

on Population Growth", in The National Academy of Sciences, Rapid Population Growth, Consequences and Policy Implications, The John Hopkins Press, Baltimore and London, 1971, pp 149-159.

18. Because of the high cost of child rearing, if a child is treated as a producer, Euke, according to Schultz, shows that he/she generally yields a low rate of return, for the childhood period of dependency absorbs sufficient resources to offset much of the child's future earnings as a mature worker. See Schultz, ibid, p 164.
19. The approximate length of this main roadway is 270 miles.
20. This represents a 22.7% reduction of the population engaged in agriculture between 1960 and 1970.
21. It does not mean that only one person out of every eleven entering the labour force obtained employment. Because the birth rate during the period 1947-1970 was high and infant mortality reasonably low a high proportion of the population was always in the ages below 15 years. Thus the rate of unemployment was less alarming but still high.
22. In 1965 the number unemployed rose from 13,800 in 1960 to 27,000 while the labour force increased from 175,000 to 193,000, which signifies a rate of 14% unemployment in 1965 compared to 7.9 in 1960. Thus unemployment increased by 43.5% during the five year period, and only by 1.2% in the 1965-70 period.
23. The average number employed in the fields declined from 21,641 in 1950 to 14,327 in 1972 (a decline of approximately 35%). During this period productivity per man increased from 6.86 tons per man to 16.66 tons (an increase of 242.8%), and total output from 193,561 to 283,401 (an increase of 89,840 tons by 31.7%). See F Sukdeo, The Sugar Industry and Economic Transformation in Guyana, a Caribbean Public Enterprises Project Paper presented at the Barbados Workshop, Sept 1978, Univ of Guyana, Mimeo, 1978, p 56 and Table No 10.
24. A further elaboration of this is presented in the section on causes of rural-urban migration in Chapter 3.
25. Before 1946 there was more or less an absence of any notable form of political consciousness by the majority of brown and black populations and only a small minority of the middle class concerned themselves with the state of government and politics in the country. But around 1946-1950 there was a rise of awareness by persons in all walks of life. Africans in Government civil and public service employment began to agitate for free trade unions. The hitherto sedate East Indians began to loosen the grip that the sugar companies had on them. Increasingly they began to strike for higher wages and improved conditions of work. For reasonable accounts of the rise of political

consciousness in Guyana during this period see Cheddie Jagan, The West on Trial, Michael Joseph, London, 1966, Chs 4, 5 and 6; Peter Simms, Trouble in Guyana, George Allen and Unwin, London, 1966, Chs 10, 11 and 12; American University, Handbook on Guyana, Johnson Research Associates, 1969, Ch 14.

26. Mainly long hours of arduous work for extremely low (pittance) wages and under deplorable conditions in the case of sugar workers, a 'system of privilege' and 'segregation' in government employment and the general working of the economy to propagate exploitation of the people and the country. See The West on Trial, op cit, Ch 4.
27. Jagan wanted the PPP-backed General Industrial Workers Union (GIWU) to replace the Sugar Producers-backed Man Power Citizens' Association (MPCA) as the union to represent workers in the sugar industry.
28. The British were alarmed by public statements of leading members of the People's Progressive Party which was in power. The Party's leaders were in support of the 'Marxist' doctrine of development and by a controversial labour relations bill. These two developments infuriated the anti-Communist feelings in Britain, which was then under a Labour government. As a result the constitution of the colony was suspended on 8 October 1953. Most of the leading members were jailed and an interim government under the Governor was appointed.
29. Peoples National Congress.
30. The supporters of Burnham were mainly from the African-dominated urban areas while Jagan's followers were mainly from rural constituencies where most of the East Indians live.
31. See Cheddie Jagan, West on Trial, op cit, Ch 11.
32. The country was divided into 35 electoral seats. In the previous elections there were 14.
33. The main aim was to remove the MPCA.
34. This was generally called the 80-day strike.
35. For a good chronicle of events during this turbulent period see Peter Simms, Trouble in Guyana, op cit, Chs 19 and 20.
36. UF - United Force led by Peter d'Aguiar, a Portuguese industrialist.
37. The fear that was in many Indians of an 'African Take-over', and a continuation of burning, looting and violence that the Indians attributed to the Africans.

38. The Mission noted that there was little coordination between government departments in the preparation and execution of plans. In the development programme itself, the Mission observed that there was a "comparative neglect" of vital sectors such as transport, communications and industry, and that there was a tendency to allocate "overgenerously" to the relatively less productive social welfare services. See IBRD, The Economic Development of British Guiana (Report of a Mission Organised by IBRD at the Request of the Government of Guyana), John Hopkins Press, Baltimore, 1953, p 17.
39. During this period the large Black Bush land development scheme was completed. Most of the preliminary 'works' were completed on other schemes such as Cane Grove, and drainage and irrigation projects such as Boerasiri and Tapacuma.
40. In the largest of these schemes, i.e. Black Bush Polder, on which G\$ 12.6 million were spent - not counting civil engineering costs, only 1,172 families were settled at a cost of \$10,700 per family, which was a phenomenal sum by Guyanese standards. In view of such an expenditure to benefit only a few rice farmers the scheme was severely criticised. See Rene Dumont, Planning Agricultural Development, FAO Report to the Government of British Guiana, FAO, Rome, 1963, p 19. (Later the number of settlers increased to 1,440.)
41. See Chapter 3 on Causes of Rural-Urban Migration.
42. The level of investment declined (see Table 23 in Appendix). Also, many of the subsidies to the Industry were terminated.
43. The system of party politics and political patronage in Guyana, according to Premdas (1977 : 79), is such that the Party in Government is expected to provide employment for its supporters. Hence, with the PNC in Government many Afro-Guyanese who comprise the majority of active party supporters are inclined to move to Georgetown in the hope of employment. See R Premdas, 1977, "Guyana Communal Conflict. Socialism and Political Reconciliation", in Journal of Inter-American Affairs 30, 1977, pp 63-83. (Ralph Premdas was formerly a lecturer in Politics at the University of Guyana.)

NOTES : Chapter Three

1. See footnote 13, Chapter 2. The sugar industry was shown to be notorious for underpaying workers. Before and at the end of the last century wages were determined by the amount of labour the Sugar estates managed to secure from the outlying areas. In years when this outside labour was surplus resident sugar workers, as shown by Adamson (1972), had to work twice as hard and longer to secure the same wages as they would have received during 'normal' years. Later, Reubens and Reubens (1962) noted that wages were stagnant during the 1930's and most of the 1940's. This was because the Estate 'managements' continually sought to reduce costs by reducing wage rates or by increasing the number of tasks to be performed. Inevitably this led to strikes and to popular feeling among workers that they might as well "sit and starve rather than work and starve" (Jagan, 1966). See Alan Adamson, Sugar Without Slaves, op cit, p 137; E P and B G Reubens, Labour Displacement in a Labour Surplus Economy : The Sugar Industry of British Guiana, Institute of Social and Economic Research, U W I Jamaica, 1962, pp 39-41; C B Jagan, 1966, West on Trial, op cit, p 109.
2. Ex-slaves not subservient to their former masters were forced to leave the estate's premises. As slaves they received no wages and so could not purchase their dwellings or provision plots. Hence those who were not prepared to continue working (now for a wage) had to migrate.
3. For an indication/account of the strength of ethnic ties of the two main groups (i.e. East Indians and Negroes) see R T Smith and C Jayawardena, "Marriage and Family amongst East Indians in British Guiana", Social and Economic Studies 59, pp 321-376, I S E R Jamaica, 1959; R T Smith, 1956, The Negro Family in British Guiana, Routledge and Kegan Paul, London.
4. Prior to 1960 the Censuses were merely head counts (of people) at major areas of residence, usually the main urban concentrations, Sugar Estates and main villages.
5. This was very surprising considering that prior to 1960 many of the employment establishments present at this time were absent or undeveloped. Most of the employment opportunities were in (or were supposed to be in) rural rice growing or sugar producing areas, hence those areas where the great majority of the labour force was expected to be (see Table 6 in Appendix, columns 6 and 7, which gives an indication of migrants in urban areas).

6. For census purposes the country was divided into 13 major districts (which were further sub-divided into 33 minor districts). Persons enumerated in a district in which they were not born were regarded as migrants to that district. For the purposes of this study the 13 major districts are reduced to 10, and the three interior districts, i.e. Northwest, Mazaruni/Potaro and Rupununi, are referred to as Interior District.
7. There was a major hospital in each of the country's three counties but only one was in a major rural population district. The hospital serving the East of Berbice district was located in the adjacent urban area of New Amsterdam. Thus all babies from mothers originating from East of Berbice but born in the New Amsterdam hospital and found at the time of the Census in Berbice were regarded as migrants originating from New Amsterdam. Similarly, those persons born in the Georgetown hospitals were regarded as migrants to East Coast, East Bank and West Demerara. In view of this discrepancy the 6 in 10 reverse flow from Georgetown to East Bank Demerara and the 3 in 10 (persons) moving from Georgetown to East Coast Demerara and West Demerara should be regarded with some reservations.
8. Georgetown is used to mean both the City of Georgetown and its suburbs. In the Census the Suburbs is a major area distinct from the City.
9. See for instance Browning, 1970, op cit, pp 285-286; Elizaga, 1969 : 332-336, "A Study on Immigrations to Greater Santiago (Chile)" in G Breese (ed), The City in Newly Developing Countries, Prentice Hall Inc, N Y, pp 332-359; Sabot, 1969, op cit, pp 81-89; McConnell et al, 1976, op cit, pp 39-42; and others (most of the researchers who have conducted surveys in developing countries attest to this fact).
10. See footnote 30, Chapter 1 for "Laws of Ravenstein".
11. See R T Smith, 1956, op cit, on ethnic ties of Africans.
12. This presumption can be regarded as more or less valid for three reasons. One is that few Africans were involved in agriculture as their main occupation, and the second is that this group tend by tradition to prefer wage employment in urban based activities such as Civil and Public Service jobs etc. (See also footnote 43, Chapter 1, which adds validity to this reason.) The third reason is that since the racial clashes of the mid 1960's each group tends to prefer to relocate in areas where their group predominates. Hence, since the majority of Africans were in urban areas, those areas attracted a greater flow of Africans from areas where they were both in majority and in minority. East Indians were in the majority in rural areas, and hence they predominate in the rural-to-rural flows (see Tables 13-20).

13. But since there was a tradition of universal primary education, according to Standing and Sukdeo (1977 : 307) "many migrants have moved" precisely in order to get further education and training so that the differences between urban residents and migrants have been slight. See G Standing and F Sukdeo, "Labour Migration and Development in Guyana" in International Labour Review, Vol 116, No 3, Nov-Dec 1977, pp 303-313.
14. Two studies indirectly substantiate the premise of migrants having a fair degree of occupation mobility. One is that of Ahmad Baksh (1974) "The Mobility of Degree Level Graduates of the University of Guyana". In this study Baksh (p 84) found that there was a trend by graduates to gravitate towards the city. Also, approximately 40% of the graduates interviewed had improved their qualifications and a further 35% were in the process of doing so at the time of the survey. In the case of Guyana improvement of one's qualifications meant job promotion along with increased remuneration in salary and other terms. See Ahmad Baksh, "The Mobility Level of Graduates of the University of Guyana" in Journal of Comparative Education, Vol 10, No 1, March 1974. The other study is I Sukdeo's Occupational Mobility of Secondary School Teachers, University of Guyana (mimeo), 1977.
15. Nearly all of the studies reviewed in this paper indicate that the earnings of migrants at place of destination are generally higher than previous earnings at place of origin, but few investigate migrants' earnings compared to those of the native urban population. Sabot found that only 8% of the migrants in Tanzania were in the upper income bracket. Donald Bogue, in the United States, found that 85% of migrants to Chicago were paid approximately \$100 per week in their first job. This is presumably below average in terms of American wage levels. Compared to these two studies migrants in Guyana seem to have higher returns from their migration. See R Sabot, 1979, op cit, p 196; Donald Bogue, "A Migrant's Eye View" in Brown and Neuberger (eds), Internal Migration, 1977, op cit, p 175.
16. Before proceeding to Table 13 in Appendix it is essential that an indication of distances in the country is obtained. Geographically, East Bank, East Coast and West Demerara extend from the suburbs of Georgetown for a distance of about 30 miles along the river bank in the case of East Bank Demerara, and 25 and 40 miles in the case of West Demerara and East Coast Demerara respectively (see Map 1 in Appendix). Demographically, the bulk of the population in each area is within an area of 15 miles from Georgetown. West Berbice and Essequibo Coast and Islands are considered to be at a medium distance, i.e. between 40 and 70 miles, while East Berbice and Interior Districts are considered to be at a 'long' distance, i.e. over 70 miles away from the city.
17. In the 1960 and 1970 Censuses respondents were not asked the reasons

for their moving. Deducting from the tables generated it seems as if the migration questions were related to period of movement to present location. Information on sex, ethnicity, educational attainment, occupation, etc were generated from the general questionnaire.

18. See schematic representation of migration decision in Appendix.
19. For some of the glaring instances of State patronage of sugar see C B Jagan, 1966, op cit, Chapters V and VI. For a good picture of the degree of poverty and squalor in living conditions etc see Chapter IV.
20. See Chapter Two of this paper.
21. It is estimated that there are 13.8 million acres of arable land of which 2.2 million acres are in the coastal belt of the country. At the 1960 population level the proportion of total arable land to people was nearly 25:1, or on the coastlands it was nearly 4:1. Labour was also in surplus.
22. This survey was conducted by S S Naraine, then the Minister in Charge of Works and Hydraulics, Georgetown.
23. According to Standing and Sukdeo, mechanisation in agriculture and the fragmentation of land ownership were two of the major reasons for rural out-migration. See Standing and Sukdeo, 1977, op cit, p 305.
24. As will be shown later, small farmers who were in the majority obtained extremely small profits. In years of adverse weather conditions, by not owning tractors many were unable to perform essential operations in time, hence in such years small profits are easily turned into losses.
25. Rene Dumont explicitly presents the case of Black Bush Polder where he found that mechanisation has reduced the number of man-days the farmer is required in his agricultural plot to about 38 days per year. R Dumont, Report to the Government of Guyana on Planning Agricultural Development, op cit, 1963, pp 18-20, 88.
26. For a very good account of how the 'quasi-feudal' relations of production in agriculture have bottled up rural labour see Peter Peek and Guy Standing, "Rural-Urban Migration and Government Policies in Low Income Countries", in International Labour Review, Vol 118, No 6, Nov-Dec 1979, pp 748-750. However, in Guyana since the late 1950's the landlord's (or moneylender's) 'feudal' hold over his tenants has been weakening with the rapid spread of education and transport, with the result that the hitherto bottled up peasants have rapidly out-migrated from the stagnant rural sector.

27. This level of returns was the 'Ministerial expectations' in which the Black Bush Scheme was planned. On a 15 acre sized plot it was hoped that the first crop of 15 and the second of 7½ acres of rice would yield 405 bags (140 lbs) of paddy or a net return of \$1,552. But productivity per acre was less than half of what was expected, hence the total return of \$17 in the case of a typical farmer. See Wilfred David, Economic Development of British Guiana, 1963-1974, Clarendon Press London, 1969, pp 103-107.
28. Another factor here was that insensitive relations and encumbering bureaucracy marred relations between Government and farmers. The failure of the tomato canning plant in Black Bush exemplifies such handicaps. In this case a tomato canning plant was established in the scheme, but the price offered to farmers was very much short of what would be needed to stimulate production of tomatoes. As a result the canning venture was abandoned, with farmers becoming more sceptical of Government attempts to 'better their lot'.
29. According to F Sukdeo, the average number employed in the sugar estates declined from 28,235 in 1950 to 17,394 in 1972 - a decline of 10,841 or 38%. See F Sukdeo, 1978, op cit, Table 10, p 59.
30. The nature of highly mechanised open pit mining made it unlikely that bauxite mining would employ a large number of workers. Even the production of alumina, which is entirely a chemical process, has a low labour-capital ratio. In 1954 the industry employed 2,600, and by 1971 it had risen to only 5,800. See W David, 1969, op cit, pp 187-189.
31. For an inventory of services in rural areas see UNDP/Government of Guyana, op cit, Report 4 - Settlement, Appendix A.
32. See Chapter Two on population growth.
33. In 1962 Mr L A Freeman of the Central Housing and Planning Authority estimated on the basis of population growth between 1946 and 1960 that approximately 38,188 housing units were needed in rural areas alone. On average this needed a house building programme of 2,222 houses per year, but the average number of houses being built annually was only about 1,300 (taking an average of rate of house-building between 1956 and 1962). Hence there was a progressive backlog of houses to be built, which implies the gradual increase in overcrowding etc. See L A Freeman's paper on Estimate of the Size of Housing Need in British Guiana, Ministry of Housing, 1962.
34. This was because the rate of housebuilding even after 1960 was low. Between 1960 and 1967 the rate of building was a dismal 7.96 houses per thousand population. See UNDP/Government of Guyana, op cit, Report 5 - Housing, p 6. As such, in 1970 46% of the total number of housing units in the country had only two rooms or less. The total

number of rooms in these units was 91,730 and the population to be housed was 248,232. Thus in these units there were 2.7 persons per room.

35. According to the 1970 Census approximately 80% of houses were constructed out of wood, and one third of the total houses were constructed before 1950. Since the average life of a wooden house is about 20 years this proportion of houses could be considered old. See 1970 Population Census of the Commonwealth Caribbean, Vol 9 on the housing conditions in Guyana. Census reports prepared by Census Research Programme, University of the West Indies, Jamaica.
36. In rural (coastal) areas secondary schools, providing education up to the GCE 'O' level, were available for only one out of thirteen children in primary schools in those areas. The comparative ratio for Georgetown was one place for every two children. These calculations were made from 1974/75 school enrollment. See Digest of Educational Statistics 1974/75, Planning Unit, Ministry of Education, Georgetown, Tables 9, 26, 28. (C H Enloe quotes only one in 17 pupils leaving primary school gets free secondary education to GCE level.) See Cynthia H Enloe, Guyanese Political Response to Migration, paper presented for the Annual Meeting of the American Anthropological Association, Toronto, 1972 (mimeo), Clark University. To obtain secondary education was a prime motive for migration in Guyana.
37. The 'bright lights hypothesis' is not a purely psychological phenomenon. Richard Curtain (1975), quoting on motives for migration from Conroy, says, "There is very little in the bright lights hypothesis that cannot be explained in terms of a wholly rational and understandable desire for a higher level of real income". See R Curtain, "Labour Migration in Papua, New Guinea", in Safa and Du Toit (eds), Migration and Development, op cit, p 281.
38. Censuses in Guyana were decennial population counts. For example, in this century censuses were conducted in 1901, 1911, 1921, 1931 and because of the Second World War no count was taken in 1941 but was taken in 1946. The next census was held in 1960 and then in 1970 and 1980.
39. In 1970 only 6.9% of the migrants moving to Georgetown made two or more moves before reaching the city. Thus the 732% increase in mobility is not inaccurate by much.
40. It is the opinion that the rate of rural-to-urban migration had been increasing steadily throughout the 1960's but not at the rate depicted by the census of the last years of the 1960's. According to the census (see Table 8 in Appendix), during the last 15 months a third of the movement had occurred. This is clearly an error.

41. In 1970 the City of Georgetown (including its immediate suburbs) was approximately seven times more populous than the country's second largest city, Linden. In terms of population Georgetown contained 74% of the country's urban population.
42. This was because East Indian females, who were generally more prolific in terms of live born children per adult female, predominated among females of other ethnic groups in rural areas. See Chapter 2.
43. See footnote 10, Chapter 2. Urban wages were considerably higher than rural. Of equal importance was that working conditions in urban areas were superior to those in rural areas.
44. See Paul Bairoch (1973) and Safa (1975), both of whom say that education in developing countries is not oriented to local needs. Gunnar Myrdal, on this theme, says that students in developing countries "commonly expected and were expected to become 'deskmen' not soiling their hands". The educational system, according to him, was oriented towards the preparation of locals for public service employment. The observation of the above three authors seems to be especially valid in the case of Guyana. Holders of secondary and tertiary education tend to be prejudiced against any type of manual work. For Bairoch (1973) and Safa (1975) op cit, see footnote 27, Chapter 1. See G Myrdal, 1970, The Challenge of World Poverty : A World Anti-Poverty Program in Outline, Allen Lane, Penguin Press, London, p 171. See also the outline of Chapter 6, in particular pp 170-182.
45. Another reason why persons with some education in rural Guyana were loath to take up jobs in agriculture was that such jobs were 'dead-end jobs' and had no career prospects. Urban wages were considerably higher and there were ample opportunities for increasing one's human capital stock. As opposed to this, rural migrants who had some education and did not migrate or want to do so were, in the words of Ronald Dore, "left to rot in the overcrowded inanity of rural life". See Ronald Dore, "De School? Try Using Schools for Education First: The Educational Impasse in the Developing World", in IBRD Working Paper 160, World Bank, Feb 1975, p 57.
46. Service jobs were limited to a few teaching posts and Local and Central Government officials who generally cover a geographically large area. Also various casual jobs such as drainage and irrigation maintenance were available depending on specific local conditions.
47. Recently this has become a major source of employment, drawing in the main employment seasons many of the unemployed of the Upper Corentyne District of East Berbice.

48. In 1970 the ratio of sugar estates to population in West Demerara was 1:20,000 but on the East Coast of Demerara it was 1:50,000. Although the two sugar estates on the East Coast were larger, in terms of sugar produced (and hence numbers employed) they were not disproportionally larger than those in West Demerara.
49. Access in this sense refers to that portion of the population along the coastal transport corridor, i.e. the Georgetown-Rosignol highway. Many more of the population on the East Coast resided in riverain areas, i.e. Mahaicony and Mahaica areas and at distances where it was uneconomical to commute, than in West Demerara. This was brought out by the passenger counts in 1970.
50. Compared to the other two rural areas, East Bank of Demerara in 1970 had only 16% of the rural population, yet (in 1973) it provided 34% of the total number of persons commuting daily to Georgetown. See Transport Plan of Guyana, prepared by Central Transport Planning Unit and Israel Institute of Transportation Planning and Research, 1975, Georgetown, p.44.
51. This was more or less a deliberate policy to prevent the freed slaves from becoming peasant farmers, which would serve to increase the drift away from the sugar estates and so deprive the planters of their labour. For analyses of freed slaves' attempts to own land and become farmers see A Adamson, 1972, op cit, Chapter 3. See also Rawle Farley, "The Rise of Village Settlement", in Caribbean Quarterly, Vol 3, No 2, 1953. The East Indians on the other hand were patronised by the Estates and by the Government in that they were allowed to rent small parcels of Estate land for rice growing, and finally attempts were made to settle them by providing free land. Thus East Indians, many of whom came from urban backgrounds, became agriculturalists while the Africans had no such inclination.
52. The analogy of Todaro that if 100 new jobs are created in urban areas it might draw 300 migrants seems to be especially true in the case of Guyana. See M P Todaro, Economics for a Developing World, Longman, London, 1977, p 222.
53. Due to there being one definition for the labour force and a different one for employment the findings of unemployment surveys are debateable. In 1956 the ILO Report on unemployment and under-employment reports 30% unemployment. The 1960 Census shows a lower rate. The Man-power surveys of O J C Francis (Min of Labour) in 1965 indicate a lower and declining rate of unemployment. However, it is estimated here that if a survey is conducted that is designed to unmask all of the unemployed, a proportion of between 30-40% of the labour force would be found in this category. Juvenile unemployment was always high. According to C H Enloe the Government admitted that 75% of the total unemployed were between the ages of 14 and 24. See/

- See (i) ILO/Dept of Labour Unemployment Survey, Min of Labour, Georgetown;
- (ii) O J C Francis, Report on a Survey of Manpower Requirements and Labour Force, Min of Labour, Georgetown;
- (iii) 1960 Population Census Report on Labour Force;
- (iv) C H Enloe, 1972, op cit, p 13.

54. To give an indication of this the figures for the 1970-79 period are here used. Between 1970 and 1979 the number of schools providing secondary education rose from 38 to 85 (an increase of 124%). The number of students increased from 23,000 to 52,618 (an increase of 129%). The total expenditure on education rose from \$m 22.8 to \$m 118. This huge increase in spending to give many more secondary education may not be entirely advantageous. In a situation where employment opportunities for the educated are limited this will, according to Todaro, only lead to more unemployment and greater demand for increased education to compete for the few jobs. Inevitably this will lead to a greater demand for public spending on expanding education linearly (i.e. from secondary schools to universities to specialised postgraduate training etc for jobs that were filled previously by persons of much lower education). See M P Todaro, "Education, Migration and Fertility", in IBRD Paper, op cit, p 26. Education statistics were obtained from Government of Guyana Publication 10 Years of Achievement 1970-1980, Ministry of Information, Georgetown, pp 7-8.
55. Where the Government is the employer such practices no doubt cause a considerable amount of antagonism and malingering within departments. Hence it affects the overall efficiency of 'Government'. This practice also contributes to the ethnic polarisation in occupation. Africans tend to go to public and civil service jobs and Indians to the sugar estates.
56. In 1945 a survey of housing in Georgetown showed the need for 6,930 units. By 1960 13,060 were needed as well as repairs to existing stock. See L A Freeman's paper, 1962, op cit.
57. These statistics were obtained from Vol 9 of the 1970 Population Census Reports and from F Sukdeo, Constraints of Urban Planning in the Commonwealth Caribbean Countries, University of Guyana (mimeo), Nov 1973.
58. Statistics for the comparison between Albiontown and Queenstown wards of Georgetown were obtained from J J Heins, "Spatial Inequality in Guyana. A Case Study of Georgetown", in Tijdschrift voor Econ en Soc Geografie 69, Nr $\frac{1}{2}$ 1978, pp 39-40.
59. The argument of N V Sovani (1972 : 329) seems applicable here. As Sovani argues, this movement of capital to Georgetown where it is likely to have higher returns will increase the pace of economic

development. This may be true, but if there is unequal redistribution of income favouring the urban areas, as is the case in most of the poor developing countries, then the channelling away of rural funds will accelerate inequality and disadvantage rural areas. This seems to be the case in Guyana. See N V Sovani, "The Analysis of Over-urbanisation" in Gerald Breece (ed), The City in Newly Developing Countries, op cit, pp 322-330.

60. In the City and Suburbs of Georgetown a number of large employment establishments are owned and operated by migrants to the city.
61. This statistic on employment creation was obtained from the Report on Establishments Enquiry, Ministry of Labour and Social Security, Georgetown, 1969.
62. This fact is dealt with later in Chapter Four, Sections 1 and 2.
63. The education curriculum in primary schools is basically dedicated to the three 'Rs' (writing, reading and arithmetic). At the secondary level arts subjects predominate, and the same can be said of the University of Guyana. The following statistics are intended to lend credence to the above. In 1975, out of the total number of students who sat and gained passes at the London GCE examination 65.5% gained passes in arts subjects, and 11.4% and 22.5% in social and natural sciences respectively. In the local University between the academic years 1966/67 and 1974/75, out of 797 persons graduating in Degree programs, 53.9% were in arts subjects, and 27.4% and 18.7% in social and natural sciences respectively. At the Diploma level where practical subjects are taught only 32.7% were in engineering and related technical subjects. See Educational Digest, op cit.
64. Costs of imports were higher and the main exports to pay for such commodities, i.e. rice and sugar, were not sufficiently increased to cater for the increase in costs of imports. .
65. With the coming to office in 1964 of the new regime the emphasis on rural agriculture changed to infrastructural provision and industrial development. As a result the duty-free importation of agricultural machinery, petrol used by such machinery, and soft loans to purchase same was removed. The price of rice declined somewhat, and as a consequence profits also declined.
66. According to Premdas the East Indian population, which includes the majority of farmers, did not 'identify' with the policies of the Government in its drive to increase production etc. Hence production slackened. See R Premdas, 1977, Guyana Communal Conflict, op cit, p 78.
67. Between 1960 and 1970 the (unregulated) agricultural wage increased by about 150 to 200%.

68. Thus the benefits of migration to the origin community in Guyana are not different from those in most Latin American, African or Asian areas where rural-urban migration takes place.
69. The extent of this can only be determined empirically.
70. This is considered to be important considering the degree of communalness in Guyanese social relations.

NOTES : Chapter Four

1. Between 1970 and 1976 at constant factor cost economic services including agriculture, mining and quarrying, manufacturing and processing grew by an annual average of 0.5% while services grew by 5%. Most notably Government grew by 9% during the period.
2. See footnote 53, Chapter 3. See also Chapter 2, Section 4 (iii)(C) on employment and unemployment of the Guyanese labour force.
3. It cannot be said that the Guyanese have made optimum use of the resources at their disposal. Taking land as a resource it is reasonably plentiful but very unevenly distributed. It is used at low productivity per acre to produce low value crops mainly for export. Diversification has not occurred. Development in agriculture comes in the form of improved seed varieties that necessitate mechanisation and costly inputs of fertiliser. It also encourages large scale farming which means that many small farmers have been forced out of their traditional means of subsistence. These now migrate to more promising areas, i.e. to urban areas if they can, or eke a living from what Standing calls "occupational multiplicity". For a graphic account of reasons why countries such as Guyana have not been able to improve the livelihood of their inhabitants see Barbara Ward, Progress for a Small Planet, Penguin, 1979, Chapter 17. See also Guy Standing, "Labour Force Participation in Historical Perspective: Proletarianisation in Jamaica", A World Employment Programme, Working Paper No 50, ILO Geneva, March 1977, p 6.
4. Mainly sugar and (later) bauxite.
5. At the time when this paper was written Fred Sukdeo was a director of the nationalised Sugar Industry in Guyana.
6. See footnote 29, Chapter 3.
7. Between 1950 and 1970 the amount of sugar produced per worker during a year increased from 6.86 tons to 16.66 tons, an increase of 143%. See F Sukdeo, 1978, op cit, Table 10.
8. At the time of Nationalisation Bookers Brothers Ltd owned and were operating nine of the country's 13 sugar estates, producing 80 to 85% of the total amount of sugar produced in the country.
9. The Company was a subsidiary of Booker McConnell Ltd - a multi-national Company, with its head office in London. In Guyana the Company had interests in sugar production, commerce, manufacturing, publishing and printing, distribution, real estate, insurance, shipping

and others. For a list of the enterprises and the extent of its network see J J F Heins, 1978, op cit, p 37. The Company also operated in a number of countries in the Caribbean, in Canada, in Zambia, and in Britain. In all these operations it used its size and multinational influence to its advantage. For a brief account of the operations of this Company see G Beckford, Persistent Poverty : Underdevelopment in Plantation Economies of the Third World, Oxford University Press, London, 1972. See in particular Chapter 5.

10. According to Sukdeo (1973 : 130) the Company made substantial profits but through "deceptive accountancy manipulation" it showed a low profit level. This was possible because the Company was not incorporated locally and operated under an outdated Company Law System. From the production costs presented by Sukdeo, the average cost of producing one ton of sugar between 1967 and 1971 was \$217.47. The IBRD Mission (1970) estimated that sugar could be produced at a cost of about \$180 per ton. This is 20% lower than the production costs shown by Bookers when in fact, because of the vertical nature of the Company, it should be very much lower. See F Sukdeo, "Profitability of the Sugar Industry in Guyana", in Proceedings of the Eighth West Indies Agricultural Economics Conference, St Augustin, Trinidad, 1973, pp 123-130. See also "Current Economic Position and Prospects of Guyana", IBRD/IDA Central American Dept, Vol 2, Agriculture, Oct 1970.
11. Prof C Y Thomas, in a series of articles in the Guyana Chronicle, 1976, (newspaper) showed how Guyana was exploited by Bookers McConnell Ltd.
12. F Sukdeo in 1973, op cit, and 1978, op cit, showed the same.
13. After 1953 the PPP backed GIWU (Guyana Industrial Workers Union, later GAWU - Guyana Agricultural Workers Union) tried to gain recognition as the workers' bargaining agent in the Sugar Industry. The efforts of the PPP failed and for 24 years the Sugar Producers (Bookers) and the union were locked in combat, and during that time the industry was plagued by work stoppages in support of the union. The main reason for the lack of recognition was that the union was agitating for high wage increases. In some cases it was canvassing for a 300% wage increase for workers to achieve a comparable wage status to those in Trinidad.
14. The Industry generally enjoyed Government support and State Security forces were often used to suppress workers in their struggle for increased wages and better conditions of work.
15. The practice of bringing forward of the premature reaping of canes became a common practice since the early 1960's as the industry strived to meet its quota from a slowly expanding acreage and declining productivity of canes per acre. It should be noted that the

sucrose content of the stalks is sufficiently high to produce sugar from canes 6-8 months old but its sugar yield is highest when the canes are about 12 to 15 months old.

16. Bauxite ore in Guyana is obtained from open pit mining.
17. Although the wage level is the highest in this industry it is prone to "wildcat strikes".
18. For an account of the early growth of the rice industry see J R Mandle, "Population and Economic Change : The Emergence of the Rice Industry in Guyana 1895-1915", in Journal of Economic History, 30, 1970, pp 785-801. See also J L R Singh, The Coastal Lowland of Guyana : A Study in Agricultural Geography, unpublished thesis, London University, 1970.
19. According to W B Mitchell and others, the land policy was changed by the 1956 ordinance. But this was purely a tenureship ordinance aimed at protecting rice farmers and as such it did nothing to change the existing land policy. According to Gyanchand, the policy has been unchanged since 1931. C K Meek (1949) shows that the last legislation to be enacted concerning land policies in the Colonies was in 1938. Thus effectively the land policy in Guyana has not changed since 1938. See W B Mitchell and others in American University Handbook on Guyana (1969), op cit, p 240; Gyanchand, Estimates on a Three Year Plan for Guyana, Government Printery, Georgetown, 1963, p 36; C K Meek, Land, Law and Custom in the Colonies, London, 1949.
20. See C A Cole, Memorandum on Titles to Crown Lands with an Historical Background and Recommendations for Control. Measures for Maximum Utilisation of Land, Ministry of Lands, Georgetown, n.d.
21. See Rice Farmers (Security of Tenure) Ordinance 1956, Ministry of Agriculture, Georgetown.
22. The information on land holdings (land distribution) is very unclear.
23. See Rene Dumont, 1963, op cit, p 17.
24. It is estimated that, under normal conditions, a 45 hp tractor would do the work, with relative ease, of 12-15 men each with a pair of bullock, in one day (this is in the case of land preparation or even any other work related to rice farming).
25. The traditional method of transplanting seedlings from seed bed (nursery) by hand.

26. This fact has been brought out by a number of empirical studies. See for instance articles by M K Raj and C H Gotsch, in Mechanisation and Employment in Agriculture, ILO Geneva, 1973. See also K C Abercrombie, "Agricultural Mechanisation and Employment in Latin America", in Mechanisation and Employment in Agriculture : Case Studies in Four Continents, ILO Geneva, 1974. For a general work covering a number of countries see ILO General Study, Why Labour Leaves the Land, A Comparative Study of the Movement of Labour out of Agriculture, Studies and Reports No 59, ILO Geneva, 1960.
27. The tractor made the 'bullock' virtually 'extinct'. The result is that in years when excessive rainfall reduces the efficiency of tractors very little hiring is done. There are no bullocks to which farmers who do not own tractors could turn, and hence hundreds of acres are left uncropped, or unreaped, in the case where the appearance of combine harvestors had made most of rural farm labour redundant.
28. Rice cultivation in Guyana depends to a great extent on the rainy season for sowing and the dry season for reaping.
29. Because of the heavy clayey soils the operating efficiency of the machines is also reduced. Breakages are frequent. Most models of tractors are old and outdated, and as such replacement parts are difficult to obtain. Many farmers also lack technical 'know how' concerning their machines. See F Sukdeo, "Utilisation of Tractors in the Rice Industry in Guyana", in Proceedings of the Tenth West Indies Agricultural Economics Conference, Vol II Working Papers, St Augustin, Trinidad, 1975, pp 55-59.
(In a survey of tractor utilisation in Black Bush Polder Sukdeo found that the majority of the tractors were old (78% were over nine years old) and in poor working condition. Costs of repairs, labour and parts were high. In 1974 more than three quarters of the tractors in working order (78%) prepared less than 40 acres each for the autumn rice crop.)
30. This does not mean that all farmers had low yields. Good or efficient farmers achieve reasonable yields, but low yields by the larger and some small farmers depress total yields in the national averages. See IBRD Report 1970, op cit, p 13.
31. It is estimated that a farmer on a ten acre plot needs to spend an average of 30-50 days. But this may depend on whether the farmer owns a tractor or not. If he does not then he may spend several days trying to secure the hire of a tractor to do the various tasks 'in time'. Also he may spend considerable time in trying to obtain supplies, i.e. seed paddy, fertilizer, drugs, spraying equipment, empty bags etc from the Rice Corporation's offices.

32. The UN/FAO year books on agricultural production show rice yields in Guyana to be among the lowest in the world.
33. It is not unusual for farmers to pay between 30-40% on loans from the local money-lender.
34. Food is generally more available in Guyana than in many poor countries, but as far as nutrition is concerned the evidence, according to Guy Standing, "points to a widespread incidence of malnutrition". A nutrition survey in 1971 showed that about half of the population were consuming less than 80% of the recommended daily intake of energy. For an in depth study of malnutrition in Guyana see G Standing and R Szal, Poverty and Basic Needs : Evidence from Guyana and the Philippines, ILO Geneva, 1979, see pp 41-52.
35. In one case the alternative pasture offered (i.e. at Moblissa for dairy farmers in the Suburbs of Georgetown) was distantly located and the pasture itself was undeveloped at the time when dairy farmers were urged to take their cattle there.
36. In many cases the retail price for crops in the municipal markets was twice what the main government buying agency (Guyana Marketing Corporation) paid farmers in rural areas. In the case of plantains in 1970 GMC paid farmers an average of 5.4 ¢ per lb while the retail price was nearly 11 ¢. In 1977 the pricing policy of the agency was the same. Farmers were paid 18 ¢ per lb while the average retail price was between 45-50 ¢ per lb. With many other types of produce a similar pricing gap was present. See Municipal Market Statistics, Ministry of Agriculture Resource and Planning Division, Georgetown.
37. See for instance Myrdal (1968, 1970) for numerous references to the negative effects of 'undying' tradition to agricultural development. See also the monumental work of Ladejinsky (1977) on Land and Tenancy Reforms in India. See Myrdal (1968), "Asian Drama", op cit, 1970; "The Challenge of World Poverty, op cit; L J Walinsky (ed), The Selected Papers of Wolf Ladejinsky, Agrarian Reform as Unfinished Business, Oxford University Press.
38. See Myrdal, 1970, "The Challenge of World Poverty," op cit, Ch 7. This factor is not new and has become more rampant in recent years.
39. The capital intensive industries in these countries could not compete with their European counterparts which benefitted from certain comparative advantages, internal and external economies of scale, etc.
40. See for instance Erich H Jacoby, Man and Land: The Fundamental Issue in Development, London, Andre Deutsch, 1971; K Griffin,

The Political Economy of Agrarian Change: An Essay on the Green Revolution, London, Macmillan, 1974; M Lipton, Why Poor People Stay Poor, London, Temple Smith, 1977.

41. Most of the observers of land and agrarian reform in Developing Countries attest to this fact. See for instance Jacoby, 1971, op cit; Griffin, 1974, op cit; Ladejinsky, 1977, op cit; W C Thiesenhusen, "Green Revolution in Latin America: Income Effects, Policy Decisions", Land Tenure Centre Research Paper No 83, University of Wisconsin-Madison, 1973.
42. See D Kanel, "Creating Opportunities for Small Farmers: The Role of Land Tenure and Service Institutions", Land Tenure Centre Research Paper No 92, University of Wisconsin-Madison, 1973. Kanel shows that in some Latin American countries small farmers receive only between 2 to 30% of farm credit to the agricultural sector. See also Peter Dorner, "Problems and Prospects of Multi- and Bi-Lateral Assistance for Agricultural Development", Land Tenure Research Paper No 81, University of Wisconsin-Madison, 1973.
43. For some of these effects see W C Thiesenhusen, 1973, Land Tenure Research Paper No 83, op cit; also 1973, "Suggested Policy for Industrial Invigoration in Latin America", Land Tenure Research Paper No 80, University of Wisconsin-Madison.

APPENDICES

APPENDIX I

1. Brief Description of Major Population Areas (Districts)

For census purposes Guyana has been divided into thirteen major population districts but for the purposes of this thesis the three interior regions North-West, Mazaruni-Potaro and the Rupununi districts have been regarded as Interior Districts. Also the city proper and its suburbs have been regarded as Greater Georgetown and have been referred to simply as Georgetown. As such, the country is considered as having ten population districts. The following is a brief description of each of these districts. For a location of these districts see Map *iv* in Appendix.

Area 1. City of Georgetown This is the chief city and port that has, over the years, grown to assume primate characteristics over other urban areas in the country. The main factors causing this development were that the city was (and is) the political, administrative capital of the country and its main centre of industry and commerce. From it radiate the main transport and communication links with the country, making it the hub of economic and social life in the country. The original population of plantation owners and petty bourgeoisie became minority groups with the influx of freed slaves who migrated to the city in search of employment. Since the early fifties East Indians have shown a preference for urban living and have been slowly gravitating to it from their rural habitations. As a result negroes have become by far the most populous group, with East Indians ranking as the second most important group. The attraction of the city to these two main groups (negroes and East Indians) has resulted in serious overcrowding in city centre areas, and since the late 1950's the overspill began to locate in vacant lands adjacent to the city. Also, because of inner city overcrowding there was a substantial amount of relocation by upper and middle classes to low density suburban areas. Overcrowded areas in the city quickly took on slum characteristics and continued to deteriorate. Migrants who were unable to find cheap housing in the city moved to the adjacent rural areas.

Because most of the country's industrial and manufacturing (apart from sugar, bauxite and rice) commerce and administrative activities were located in Georgetown there was considerable commuting to the city.

Area 2. East Bank of Demerara As Map IV in Appendix shows, settlement in this area is of the ribbon type and extends from the suburbs of Georgetown to Timehri. The population is mixed, with East Indians being the most populous group (63% in 1970). The major economic activity is wage employment in processing and manufacturing industries in the area and small scale agriculture. There is also considerable commuting to the city for reasons of employment and commerce. In relation to other rural and rural areas this area has the greatest employment opportunities.

Area 3. East Coast Demerara Settlement in a ribbon fashion stretches for some 40 miles along the Atlantic sea coast. The areas immediate to Georgetown can be described as rural while those furthest away are rural, with agriculture (mixed farming) as the principal economic activity. This area is also an old plantation zone. Much of the population in the central area is employed in the two large sugar estates located there. As in East Bank, there is also a considerable amount of daily commuting to Georgetown for employment etc. In 1970 East Indians comprised 62% of the population, while Africans were less than a third.

Area 4. West Demerara This area includes both the West Bank and Coast of Demerara. The pattern of settlement is the same as in East Coast or East Bank of Demerara. 70% of the population in 1970 were East Indians who were principally rice and vegetable farmers or sugar estate workers. There is also a substantial amount of daily commuting to Georgetown.

Area 5. Upper Demerara River This is the riverain interior region of Demerara. Approximately 83% of its population in 1970 was concentrated in the mining township of Linden. The remainder of the population is

scattered in riverain settlements or located along the main Georgetown/Linden Highway. Nearly 90% of the population are Africans or of mixed stock. Like Georgetown, Linden town, which tends to be used interchangeably with Upper Demerara River since it contains the vast majority of the population, suffers from overcrowding which has resulted in unplanned 'sprawls' and slums.

Area 6. West Berbice Settlement here is of the same ribbon type. East Indians account for a little over 60% of the population, while Africans were just about one third in 1970. Because of its location between 40 and 65 miles from Georgetown, there is little daily commuting to Georgetown. Rice farming and estate employment are the main economic activities.

Area 7. New Amsterdam This is an old urban settlement that has, more or less, been dormant over recent years. Compared with the suburbs of Georgetown with 33% growth or Linden with a 53% increase in the 1960-70 decade, New Amsterdam increased by only 26.5% over the period. It is generally known as the administrative centre of the county of Berbice - and as such 'office' employment features heavily along with some commerce. Africans and persons of mixed descent account for 65% of the total population.

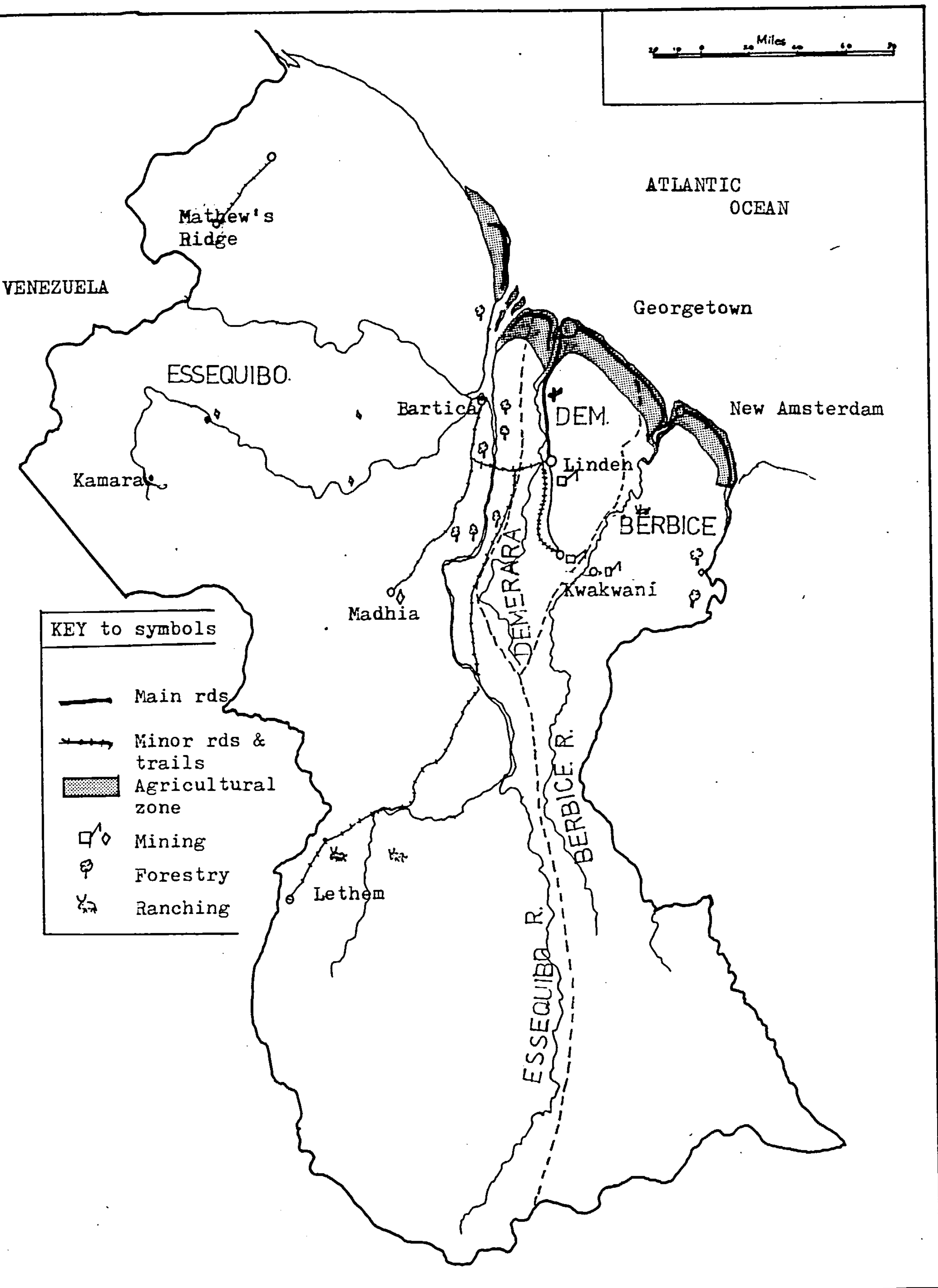
Area 8. Rest of Berbice Except for Georgetown this is, demographically, the largest area in the country. It contains one fifth of the entire country's population and more than one quarter of all rural persons. Settlement is limited to a narrow strip along the main roadway and isolated villages in the Berbice Canje and Corentyne riverain areas. By far the majority of the population are East Indians (86% in 1970). The major employment activities in this area are rice farming and sugar estate employment. In relation to other agricultural areas, i.e. West Berbice and Essequibo, this region has tended to be more developed with better employment and related opportunities.

Area 9. Essequibo Coast Although only between 40-70 miles from Georgetown, this is the most isolated of the coastal regions because of the two river systems, the Demerara and Essequibo, which separate it from Georgetown. It is generally regarded as having the lowest rate of development and services. In 1970 East Indians comprised approximately 65% of the population. Major economic activities along this coast are primarily in rice and vegetable farming. Since the end of the 1960's there has been a small amount of seasonal commuting to West Demerara for employment on sugar estates.

Area 10. Interior Districts Three areas comprise this district: the North-West Region, Mazaruni-Potaro and Rupununi. Amerindians comprised over 60% of the total population in 1970. The other main group, Africans and Mixed, were approximately one third of the population. This is the furthest region from Georgetown and is accessible only by river, as in the case of the North West Region, and mainly by air for Rupununi. The Mazaruni-Potaro region can be reached by interior roads and trails. The principal activities are subsistence farming and some cash cropping in the North West; mining in the Mazaruni-Potaro; and cattle ranching and subsistence agriculture in the Rupununi.

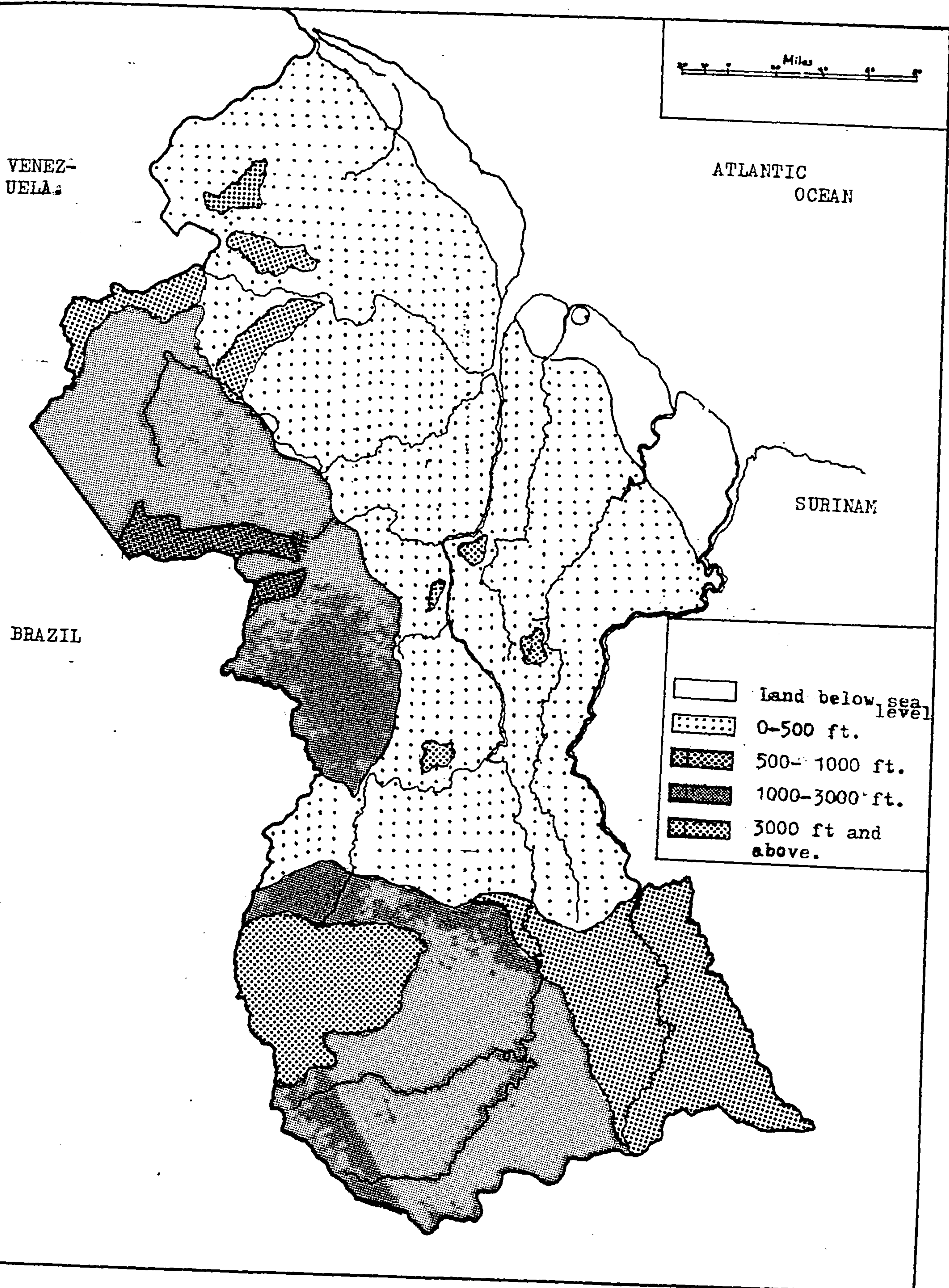
MAP I GUYANA

GENERAL ECONOMIC ACTIVITY



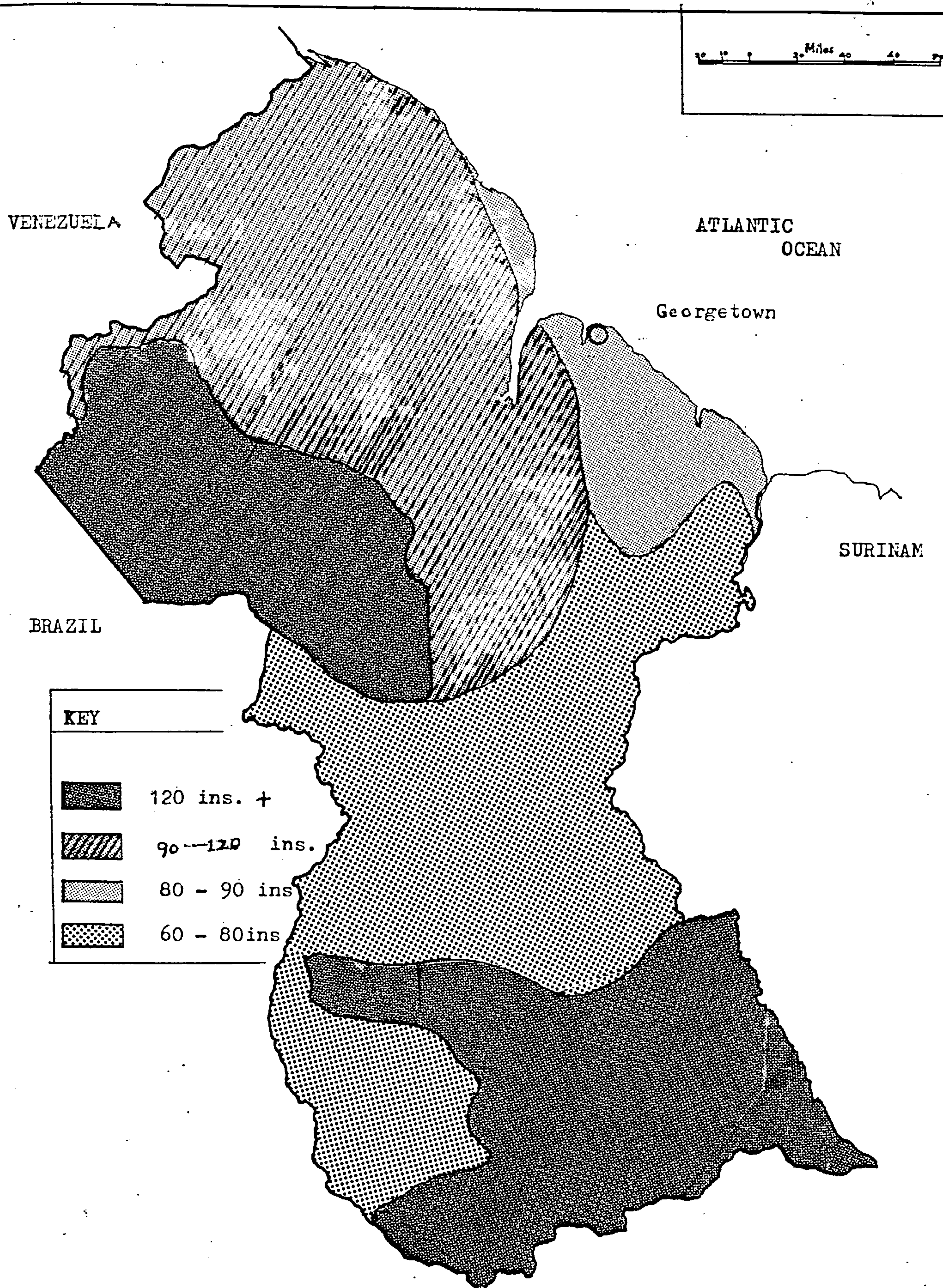
MAP II

TOPOGRAPHY: GUYANA



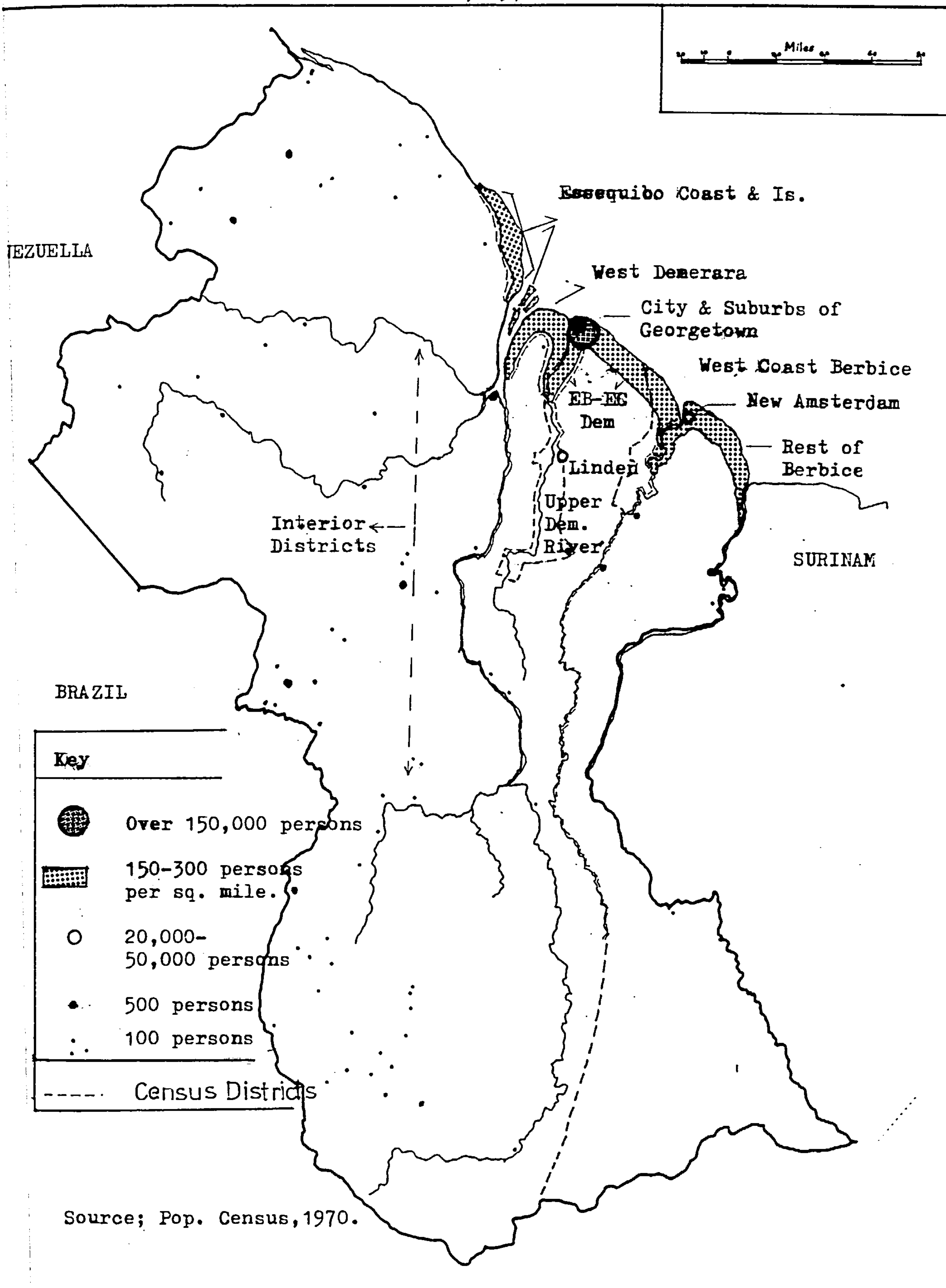
MAP III

AREAL VARIATION - RAINFALL : GUYANA.



MAP IV

SPATIAL DISTRIBUTION OF POPULATION AND MAJOR CENSUS DISTRICTS, 1970.



APPENDIX III

STATISTICAL APPENDIX

TABLE 1 East Indian Infant Mortality Rate 1939-1960

| Year | Infant Mortality (Rate per 1000) |
|------|-------------------------------------|
| 1939 | 118 |
| 1945 | 100 |
| 1950 | 78 |
| 1955 | 68 |
| 1960 | 56 |

Source: F. Sukdeo, 1973, Malaria Eradication and Population Growth, op cit, Table 6, p 21.

TABLE 2 Proportion of Women of all Conjugal Conditions who Reached Motherhood by Age and Ethnic Group 1946

| Ethnic Group | Proportion who Became Mothers | | | | Proportion Childless |
|------------------|-------------------------------|-------|------|----------|----------------------|
| | Below 19 | 19-23 | 23+ | All Ages | |
| Negroes | 20.1 | 29.8 | 30.4 | 80.3 | 19.7 |
| East Indians | 43.7 | 28.8 | 16.7 | 89.2 | 10.8 |
| All Other Groups | 16.4 | 26.4 | 31.8 | 74.6 | 25.4 |

Source: ibid, Table 11, p 34.

TABLE 3 Population of Guyana by Age Group 1946, 1960, 1970

| Age Group | Population ¹ | | | Percentage of Population in Age Group | | |
|-----------|-------------------------|---------|---------|---------------------------------------|--------|--------|
| | 1946 | 1960 | 1970 | 1946 | 1960 | 1970 |
| All Ages | 369,678 | 560,330 | 699,848 | 100 | 100 | 100 |
| 0-4 | 51,982 | 98,177 | 110,640 | | | |
| 5-9 | 46,634 | 90,948 | 118,512 | | | |
| 10-14 | 40,798 | 70,103 | 100,593 | 37.7 | 46.2 | 47.1 |
| 15-19 | 36,387 | 51,884 | 79,383 | | | |
| 20-24 | 32,247 | 42,157 | 56,635 | | | |
| 25-29 | 26,504 | 35,959 | 39,759 | | | |
| 30-34 | 26,354 | 32,458 | 33,467 | | | |
| 35-39 | 22,435 | 29,003 | 31,764 | | | |
| 40-44 | 21,040 | 23,767 | 28,262 | (44.6) | (38.4) | (38.4) |
| 45-49 | 17,835 | 22,774 | 24,611 | | | |
| 50-54 | 12,733 | 18,015 | 20,037 | | | |
| 55-59 | 11,138 | 15,098 | 18,271 | | | |
| 60-64 | 8,841 | 11,177 | 12,809 | 58.3 | 50.4 | 49.3 |
| 65+ | 14,751 | 18,810 | 25,104 | 4.0 | 3.4 | 3.6 |

¹Population at Census date, usually in April of the Census year.

Source: Population Census 1970, Summary Tables, Statistical Bureau, Ministry of Econ Dev, Georgetown.

TABLE 4 Net Population Increase and Migration¹

| Year | Mid-Year Population | Natural Increase | Net Increase | Net Migration Change |
|----------------|---------------------|------------------|--------------|----------------------|
| 1960 | 563,785 | | | |
| 1961 | 584,514 | 19,533 | 20,729 | + 1,196 |
| 1962 | 600,393 | 19,921 | 15,879 | - 4,042 |
| 1963 | 616,680 | 19,446 | 16,287 | - 3,159 |
| 1964 | 629,892 | 19,268 | 13,212 | - 6,056 |
| 1965 | 643,041 | 19,140 | 13,149 | - 5,991 |
| 1966 | 658,589 | 18,237 | 15,548 | - 2,689 |
| 1967 | 674,196 | 18,256 | 15,607 | - 2,649 |
| 1968 | 686,158 | 18,111 | 11,962 | - 6,149 |
| 1969 | 694,305 | 16,982 | 8,147 | - 8,835 |
| 1970 | 701,940 | 18,895 | 7,635 | -11,260 |
| 1971 | 711,498 | 19,708 | 12,342 | - 7,366 |
| 1972 | 724,058 | 20,056 | 12,560 | - 7,496 |
| 1973 | 736,840 | 20,410 | 12,782 | - 7,628 |
| 1974 | 753,787 | 20,770 | 16,947 | - 3,823 |
| 1975 | 766,187 | 17,753 | 12,400 | - 5,353 |
| TOTAL | - | 286,486 | 205,186 | 81,300 |
| Annual Average | - | 19,099 | 13,679 | 5,420 |

¹International migration.

- Sources: 1. 1960-1970: UNDP/Govt of Guyana, Urban and Regional Planning Project, National Physical Dev Strategy. 1977, Background Study - 2. Population, Table 20, p 32.
2. Own calculation from Population Statistics (unpublished) of the Statistical Bureau, Ministry of Econ Dev.

TABLE 5 SHOWING LOCATION OF THE TWO MAIN ETHNIC GROUPS BY
MAJOR URBAN AND RURAL AREAS 1970

| Major Area | Total | Proportion of Ethnic Composition of Population | | |
|--------------------|-------|--|--------------|-------|
| | | AFRICANS | EAST INDIANS | OTHER |
| Urban | | | | |
| Georgetown | 100 | 50 | 25 | |
| New Amsterdam | 100 | 52 | 23 | 25 |
| Linden (U.D.R.) | 100 | 71 | 7 | 22 |
| Average Urban | | 58 | 18 | 24 |
| Rural | | | | |
| East Bank Dem. | 100 | 28 | 63 | 9 |
| East Coast Dem. | 100 | 30 | 63 | 7 |
| West Demerara | 100 | 22 | 73 | 5 |
| West Berbice | 100 | 32 | 63 | 5 |
| Rest Berbice | 100 | 13 | 86 | 1 |
| Essequibo Coast | 100 | 18 | 65 | 17 |
| Interior Districts | 100 | 15 | 5 | 80 |
| Average Rural | | 23 | 60 | 17 |

Source: Population Census Reports 1970.

The population of Linden Town is more than 80% of the population of U.D.R. - Upper Demerara River. Since it is not possible to obtain exact percentages (figures) for Linden, that of U.D.R. is a useful approximation.

TABLE 6 INTERNAL MIGRANTS TO PLACE OF RESIDENCE BY EDUCATIONAL
ATTAINMENT BY MAJOR AREA 1970 (Percentage)

| Place of Residence | Total % | Migrants with Primary Education | Migrants with Secondary Education | Migrants with University Education | Migrants with Other incl. Not Stated | Migrants with No Education |
|-----------------------|---------|---------------------------------|-----------------------------------|------------------------------------|--------------------------------------|----------------------------|
| City of Georgetown | 100 | 66.5 | 23.1 | 1.4 | 3.2 | 5.8 |
| Suburbs of Georgetown | 100 | 68.4 | 20.1 | 1.1 | 4.0 | 6.4 |
| East Bank Dem. | 100 | 73.1 | 9.5 | .3 | 3.2 | 13.9 |
| East Coast Dem. | 100 | 72.6 | 10.7 | .6 | 2.7 | 13.4 |
| West Demerara | 100 | 71.8 | 8.3 | .2 | 2.7 | 17.0 |
| Upper Dem. River | 100 | 77.9 | 11.7 | .4 | 4.4 | 5.6 |
| West Berbice | 100 | 75.1 | 7.3 | .3 | 3.0 | 14.3 |
| New Amsterdam | 100 | 69.9 | 17.4 | .8 | 3.0 | 8.9 |
| Rest of Berbice | 100 | 75.0 | 8.3 | .1 | 1.7 | 14.9 |
| Essequibo Coast & Is. | 100 | 77.8 | 4.8 | .1 | 1.7 | 15.6 |
| Interior Districts | 100 | 74.6 | 11.7 | .4 | 2.6 | 10.7 |
| Average % | | 72.9 | 12.1 | 0.5 | 2.9 | 11.5 |

Source: 1970 Population Census Report, Vol. 5.

TABLE 7 INTERNAL MIGRANTS BY NUMBER OF MOVES TO PLACE OF
RESIDENCE BY MAJOR AREAS 1970

| Place of Residence | Number of Moves % | | | | | |
|-----------------------|-------------------|------|------|-------|------|--------------------|
| | Total | One | Two | Three | Four | Five or More |
| City of Georgetown | 100 | 80.2 | 17.5 | 1.5 | .5 | .3 |
| Suburbs of Georgetown | 100 | 76.2 | 19.2 | 3.2 | .9 | .5 |
| East Bank Demerara | 100 | 78.0 | 19.6 | 1.9 | .4 | .1 |
| East Coast Demerara | 100 | 82.2 | 15.0 | 1.8 | .6 | .4 |
| West Demerara | 100 | 81.5 | 15.8 | 1.8 | .4 | .5 |
| Upper Demerara River | 100 | 74.3 | 22.3 | 2.4 | .6 | .4 |
| West Berbice | 100 | 88.2 | 10.6 | .8 | .4 | 0 |
| New Amsterdam | 100 | 80.7 | 17.2 | 1.8 | .2 | .1 |
| Rest of Berbice | 100 | 86.5 | 11.9 | 1.0 | .3 | .3 |
| Essequibo Coast & Is. | 100 | 84.2 | 13.5 | 1.5 | .3 | .5 |
| Interior Districts | 100 | 65.6 | 25.8 | 5.1 | 1.3 | 3.2 |

Source: 1970 Population Census Report, Vol. 5.

TABLE 8 SHOWING TOTAL MIGRANTS BY PERIOD OF ENTRY
BY MAJOR AREAS 1970

| Major Areas (By Residence) | <u>Both Sexes</u> Period of Entry | | |
|-------------------------------|--------------------------------------|------------------------------------|-------------------------------------|
| | Pre: 1939- 1970 | Intercensal Period 1961-1970 | Proportion Arriving 1961-1970 |
| City of Georgetown | 22,855 | 13,580 | 59.4 |
| Suburbs of Georgetown | 53,789 | 35,058 | 65.2 |
| East Bank Demerara | 13,385 | 8,683 | 64.8 |
| East Coast Demerara | 22,594 | 14,494 | 64.2 |
| West Demerara | 19,996 | 10,290 | 51.4 |
| Upper Demerara River | 13,485 | 8,546 | 63.3 |
| West Berbice | 4,287 | 2,377 | 55.5 |
| New Amsterdam | 7,192 | 3,946 | 54.9 |
| Rest of Berbice | 27,355 | 16,989 | 62.1 |
| Essequibo Coast & Is. | 10,973 | 6,139 | 56.0 |
| Interior Districts | 7,447 | 5,050 | 67.8 |
| TOTAL | 203,358 | 125,152 | 61.5 |

Source: Population Census 1970, Vol 5.

TABLE 9 SHOWING MIGRANTS IN THE POPULATION 1960, AND 1970 BY
MAJOR AREA OF USUAL RESIDENCE

| Major Regions | Total Population ¹ | | Total Migrants in Population | | Proportion Migrants in Population | | % +/- in 1970 |
|------------------------|-------------------------------|--------|------------------------------|--------|-----------------------------------|------|---------------|
| | 1960 | 1970 | 1960 | 1970 | 1960 | 1970 | |
| City of Georgetown | 69571 | 63184 | 20240 | 22855 | 29.1 ² | 36.2 | 7.1 |
| Suburbs of Georgetown | 73181 | 100855 | 21607 | 53789 | 29.5 | 53.3 | 23.8 |
| East Bank Demerara | 22771 | 36600 | 8743 | 13385 | 38.4 | 36.4 | - 1.8 |
| East Coast of Demerara | 84798 | 108403 | 15954 | 22594 | 18.8 | 20.8 | 2.0 |
| West Demerara | 61089 | 78309 | 16205 | 19996 | 26.5 | 25.5 | - 1. |
| Upper Dem. River | 17549 | 28949 | 9887 | 13485 | 56.3 | 46.6 | - 9.7 |
| West Berbice | 26276 | 32975 | 4489 | 4287 | 17.1 | 13.0 | - 4.1 |
| New Amsterdam | 13359 | 17782 | 6691 | 7192 | 50.1 | 40.5 | - 9.6 |
| Rest of Berbice | 99768 | 132468 | 20543 | 27355 | 20.6 | 20.7 | .1 |
| Essequibo Coast & Is. | 44689 | 57180 | 9640 | 10973 | 21.6 | 19.2 | - 2.4 |
| Interior Districts | 31894 | 43143 | 7081 | 7447 | 22.2 | 17.3 | - 4.9 |
| Not Stated | 3 | | - | | | | |
| TOTAL | 544948 | 699848 | 14180 | 203358 | 25.9 | 29.1 | 3.2 |

1. Non Institutional

2. To nearest decimal place

- Sources
1. 1960 Population Census Report, Vol. II, Part A; III, Parts A and G.
 2. 1970 Population Census Report, Vols. 2 and 5.
 3. Annual Statistical Abstract 1974, Stat. Bureau, Min. of Eco. Dev. 1974.

TABLE 10 SHOWING TOTAL MIGRANTS ENTERING DURING 1960-1970
INTERCENSAL PERIOD BY MAJOR REGIONS

| Major Regions (by Residence) | <u>Both Sexes</u> | | | |
|---------------------------------|--------------------|-----------|-----------|--|
| | Period of Entry | | | Proportion Arriving 1969-1970 (15 months) |
| | Total 1961-1970 | 1961-1968 | 1969-1970 | |
| City of Georgetown | 13,580 | 8,688 | 4,892 | 36.0 |
| Suburbs of Georgetown | 35,058 | 21,848 | 13,210 | 37.7 |
| East Bank Demerara | 8,683 | 5,260 | 3,423 | 39.4 |
| East Coast Demerara | 14,494 | 9,851 | 4,643 | 32.0 |
| West Demerara | 10,290 | 6,557 | 3,733 | 36.3 |
| Upper Demerara River | 8,546 | 6,023 | 2,523 | 29.5 |
| West Berbice | 2,377 | 1,620 | 757 | 31.9 |
| New Amsterdam | 3,946 | 2,560 | 1,386 | 35.1 |
| Rest of Berbice | 16,989 | 12,890 | 4,099 | 24.1 |
| Essequibo Coast & Is. | 6,139 | 3,480 | 2,659 | 43.3 |
| Interior Districts | 5,050 | 2,440 | 2,610 | 51.7 |
| TOTAL | 125,152 | 81,217 | 43,935 | 35.1 |

Source: Population Census 1970, Vol. 5.

TABLE 11 COMPARING MIGRANTS WITH RESIDENT POPULATION BY
LEVEL OF EDUCATION ATTAINED, 1970

| | Primary % | Secondary % | University % | Total % |
|-----------------------|--------------|----------------|-----------------|------------|
| Georgetown | | | | |
| Resident Population | 65.0 | 32.7 | 2.3 | 100 |
| Migrants | 73.1 | 25.4 | 1.5 | 100 |
| Suburbs of Georgetown | | | | |
| Resident Population | 72.9 | 25.2 | 1.9 | 100 |
| Migrants | 76.3 | 22.4 | 1.3 | 100 |

Source: 1970 Population Census, Vol. 5.

TABLE 12 MIGRANTS TO PLACE OF RESIDENCE BY MAJOR DIVISION BY MAJOR OCCUPATION, 1970

| PLACE OF RESIDENCE | OCCUPATION | | | | | | | | | |
|-----------------------|------------|--|--------------------------|------------------|------------------------------------|----------------------------|----------------------------|---------------------|----------------------------|------|
| | Total | Prof. & Tech. incl. Admin. & Mang. | Clerical & Related | Sales Workers | Service Wks. incl. Transport | Farm Mang. & Workers | Production & Related | Labourers N.E.C. | Members of Army etc. | N.S. |
| City of Georgetown | 100 | 17.4 | 19.7 | 12.3 | 25.4 | 1.2 | 18.6 | 4.3 | 1.0 | .1 |
| Suburbs of Georgetown | 100 | 15.4 | 16.3 | 9.5 | 27.5 | 1.9 | 22.0 | 5.7 | 1.3 | .4 |
| East Bank Demerara | 100 | 9.3 | 8.8 | 8.9 | 17.2 | 23.1 | 22.1 | 9.6 | .5 | .1 |
| East Coast Demerara | 100 | 14.2 | 8.7 | 10.5 | 16.6 | 19.4 | 19.8 | 7.1 | .3 | .4 |
| West Demerara | 100 | 12.1 | 7.3 | 10.4 | 12.0 | 37.1 | 14.5 | 6.2 | .2 | .2 |
| Upper Demerara River | 100 | 13.3 | 9.3 | 9.6 | 20.9 | 3.8 | 32.7 | 9.2 | - | 1.2 |
| West Berbice | 100 | 22.2 | 3.8 | 11.7 | 12.8 | 36.1 | 10.8 | 2.3 | - | .3 |
| New Amsterdam | 100 | 25.8 | 10.3 | 11.8 | 21.8 | 4.5 | 17.8 | 7.5 | .2 | .3 |
| Rest of Berbice | 100 | 17.3 | 3.7 | 8.8 | 10.6 | 42.3 | 12.3 | 3.6 | - | .4 |
| Essequibo Coast & Is. | 100 | 17.9 | 2.8 | 7.3 | 11.2 | 41.4 | 10.3 | 8.7 | - | .4 |
| Interior Districts | 100 | 11.5 | 5.6 | 6.1 | 14.9 | 13.0 | 35.8 | 11.2 | 1.2 | .7 |

Source: 1970 Population Census, Vol. 5.

TABLE 13 IN-MIGRANTS TO GEORGETOWN BY PLACE OF BIRTH, OUT-MIGRATION
TO PLACE OF RESIDENCE AND NET MIGRATION, 1970

| Place of Birth/ Place of Residence | Migration | | |
|---------------------------------------|-----------|--------|---------|
| | In | Out | Net +/- |
| East Bank Demerara | 2,527 | 4,025 | - 1,498 |
| East Coast Demerara | 11,845 | 5,510 | 6,335 |
| West Demerara | 7,658 | 2,698 | 4,960 |
| Upper Demerara River | 2,389 | 3,422 | - 1,033 |
| West Berbice | 2,767 | 469 | 2,298 |
| New Amsterdam | 3,533 | 1,056 | 2,477 |
| Rest of Berbice | 5,883 | 1,359 | 4,524 |
| Essequibo Coast & Is. | 7,561 | 963 | 6,598 |
| Interior Districts | 2,797 | 1,629 | 1,168 |
| TOTAL | 46,960 | 21,131 | 25,829 |

Source: Population Census 1970, Vol. 5.

TABLE 14 IN-MIGRANTS TO EAST BANK DEMERARA BY PLACE OF BIRTH,
OUT-MIGRATION TO PLACE OF RESIDENCE AND NET MIGRATION, 1970

| Place of Birth/ Place of Residence | Migration | | |
|---------------------------------------|-----------|-------|---------|
| | In | Out | Net +/- |
| Georgetown | 4,025 | 2,527 | 1,498 |
| East Coast Demerara | 2,656 | 984 | 1,672 |
| West Demerara | 2,843 | 1,250 | 1,593 |
| Upper Demerara River | 902 | 480 | 422 |
| West Berbice | 354 | 112 | 242 |
| New Amsterdam | 218 | 78 | 140 |
| Rest of Berbice | 705 | 374 | 331 |
| Essequibo Coast & Is. | 1,395 | 310 | 1,875 |
| Interior Districts | 287 | 185 | 102 |
| TOTAL | 13,385 | 6,300 | 7,085 |

Source: op cit

TABLE 15 IN-MIGRANTS TO EAST COAST DEMERARA BY PLACE OF BIRTH,
OUT-MIGRATION TO PLACE OF RESIDENCE AND NET MIGRATION, 1970

| Place of Birth/ Place of Residence | Migration | | |
|---------------------------------------|-----------|--------|---------|
| | In | Out | Net +/- |
| Georgetown | 5,510 | 11,835 | - 6,325 |
| East Bank Demerara | 984 | 2,656 | - 1,672 |
| West Demerara | 1,936 | 2,844 | - 908 |
| Upper Demerara River | 627 | 2,450 | - 1,823 |
| West Berbice | 1,537 | 1,377 | 160 |
| New Amsterdam | 421 | 580 | - 159 |
| Rest of Berbice | 1,750 | 2,674 | - 924 |
| Essequibo Coast & Is. | 1,042 | 640 | 402 |
| Interior Districts | 344 | 1,057 | - 713 |
| TOTAL | 14,151 | 26,123 | -11,972 |

Source: op cit

TABLE 16 IN-MIGRANTS TO WEST DEMERARA BY PLACE OF BIRTH,
OUT-MIGRATION TO PLACE OF RESIDENCE AND NET MIGRATION, 1970

| Place of Birth/ Place of Residence | Migration | | |
|---------------------------------------|-----------|--------|---------|
| | In | Out | Net +/- |
| Georgetown | 2,698 | 7,658 | - 4,960 |
| East Bank Demerara | 1,250 | 2,843 | - 1,593 |
| East Coast Demerara | 2,844 | 1,936 | 908 |
| Upper Demerara River | 422 | 1,382 | - 960 |
| West Berbice | 363 | 181 | 182 |
| New Amsterdam | 230 | 260 | - 30 |
| Rest of Berbice | 914 | 813 | 101 |
| Essequibo Coast & Is. | 3,200 | 2,094 | 1,106 |
| Interior Districts | 387 | 717 | - 330 |
| TOTAL | 12,308 | 17,884 | - 5,576 |

Source: op cit

TABLE 17 IN-MIGRANTS TO UPPER DEMERARA RIVER BY PLACE OF BIRTH,
OUT-MIGRATION TO PLACE OF RESIDENCE AND NET MIGRATION, 1970

| Place of Birth/ Place of Residence | Migration | | |
|---------------------------------------|-----------|-------|---------|
| | In | Out | Net +/- |
| Georgetown | 3,422 | 2,389 | 1,033 |
| East Bank Demerara | 480 | 902 | - 422 |
| East Coast Demerara | 2,450 | 627 | 1,823 |
| West Demerara | 1,382 | 422 | 960 |
| West Berbice | 1,892 | 158 | 1,734 |
| New Amsterdam | 706 | 91 | 615 |
| Rest of Berbice | 1,473 | 221 | 1,252 |
| Essequibo Coast & Is. | 1,243 | 155 | 1,088 |
| Interior Districts | 437 | 320 | 117 |
| TOTAL | 13,485 | 5,285 | 8,200 |

Source: op cit

TABLE 18 IN-MIGRANTS TO WEST BERBICE BY PLACE OF BIRTH,
OUT-MIGRATION TO PLACE OF RESIDENCE AND NET MIGRATION, 1970

| Place of Birth/ Place of Residence | Migration | | |
|---------------------------------------|-----------|--------|---------|
| | In | Out | Net +/- |
| Georgetown | 469 | 2,767 | - 2,298 |
| East Bank Demerara | 112 | 354 | - 242 |
| East Coast Demerara | 1,377 | 1,537 | - 160 |
| West Demerara | 181 | 363 | - 182 |
| Upper Demerara River | 158 | 1,892 | - 1,734 |
| New Amsterdam | 289 | 1,110 | - 821 |
| Rest of Berbice | 1,533 | 2,385 | - 852 |
| Essequibo Coast & Is. | 120 | 111 | 9 |
| Interior Districts | 48 | 305 | - 257 |
| TOTAL | 4,287 | 10,824 | - 6,537 |

Source: op cit

TABLE 19 IN-MIGRANTS TO NEW AMSTERDAM BY PLACE OF BIRTH,
OUT-MIGRATION TO PLACE OF RESIDENCE AND NET MIGRATION, 1970

| Place of Birth/ Place of Residence | Migration | | |
|---------------------------------------|-----------|-------|---------|
| | In | Out | Net +/- |
| Georgetown | 1,056 | 3,533 | - 2,477 |
| East Bank Demerara | 78 | 218 | - 140 |
| East Coast Demerara | 588 | 421 | 159 |
| West Demerara | 260 | 230 | 30 |
| Upper Demerara River | 91 | 706 | - 615 |
| West Berbice | 1,110 | 289 | 821 |
| Rest of Berbice | 3,734 | 1,649 | 2,085 |
| Essequibo Coast & Is. | 202 | 88 | 114 |
| Interior Districts | 81 | 202 | - 121 |
| TOTAL | 7,192 | 7,333 | - 141 |

Source: op cit

TABLE 20 IN-MIGRANTS TO REST OF BERBICE BY PLACE OF BIRTH,
OUT-MIGRATION TO PLACE OF RESIDENCE AND NET MIGRATION, 1970

| Place of Birth/ Place of Residence | Migration | | |
|---------------------------------------|-----------|--------|---------|
| | In | Out | Net +/- |
| Georgetown | 1,354 | 5,883 | - 4,529 |
| East Bank Demerara | 374 | 705 | - 331 |
| East Coast Demerara | 2,674 | 1,750 | 924 |
| West Demerara | 813 | 914 | - 101 |
| Upper Demerara River | 221 | 1,473 | - 1,252 |
| West Berbice | 2,385 | 1,533 | 852 |
| New Amsterdam | 1,646 | 3,734 | - 2,088 |
| Essequibo Coast & Is. | 549 | 330 | 219 |
| Interior Districts | 190 | 435 | - 245 |
| TOTAL | 10,206 | 16,761 | - 6,555 |

Source: op cit

TABLE 21 IN-MIGRATION TO ESSEQUIBO COAST AND ISLANDS BY PLACE OF BIRTH,
OUT-MIGRATION TO PLACE OF RESIDENCE AND NET MIGRATION, 1970

| Place of Birth/ Place of Residence | Migration | | |
|---------------------------------------|-----------|--------|---------|
| | In | Out | Net +/- |
| Georgetown | 963 | 7,561 | - 6,598 |
| East Bank Demerara | 310 | 1,395 | - 1,085 |
| East Coast Demerara | 640 | 1,042 | - 402 |
| West Demerara | 2,094 | 3,200 | - 1,106 |
| Upper Demerara River | 155 | 1,243 | - 1,088 |
| West Berbice | 111 | 120 | 9 |
| New Amsterdam | 88 | 202 | - 114 |
| Rest of Berbice | 330 | 549 | - 219 |
| Interior Districts | 782 | 1,887 | - 1,105 |
| TOTAL | 5,473 | 17,199 | -11,726 |

Source: op cit

TABLE 22 IN-MIGRATION TO INTERIOR DISTRICTS BY PLACE OF BIRTH,
OUT-MIGRATION TO PLACE OF RESIDENCE AND NET MIGRATION, 1970

| Place of Birth/ Place of Residence | Migration | | |
|---------------------------------------|-----------|-------|---------|
| | In | Out | Net +/- |
| Georgetown | 1,629 | 2,797 | - 1,168 |
| East Bank Demerara | 185 | 287 | - 102 |
| East Coast Demerara | 1,057 | 344 | 713 |
| West Demerara | 717 | 387 | 330 |
| Upper Demerara River | 320 | 437 | - 117 |
| West Berbice | 305 | 48 | 257 |
| New Amsterdam | 202 | 81 | 121 |
| Rest of Berbice | 439 | 190 | 249 |
| Essequibo Coast & Is. | 1,887 | 782 | 1,105 |
| TOTAL | 6,741 | 5,353 | 1,388 |

Source: op cit

TABLE 23 Guyana - Government Investment in Agriculture 1954-1976

| Year | Level of Investment (G \$m) | | |
|--------------------|-------------------------------------|-----------------------|--|
| | Total Public Sector ³ | Agriculture Sector | Agriculture as a Percentage of Total |
| 1954-59 | 108.3 | 33.0 | 31 |
| 1960-64 | 82.3 | 29.5 | 36 |
| 1965 | 16.4 | 3.5 | 15 |
| 1966 | 26.3 | 6.5 | 24 |
| 1967 | 27.2 | 6.4 | 24 |
| 1968 | 32.0 | 5.5 | 17 |
| 1969 | - | - | - |
| *1970 ² | 52.1 | 7.6 | 15 |
| 1971 | 55.8 | 15.2 | 27 |
| 1972 | 60.6 | 17.8 | 29 |
| 1973 | 85.0 | 17.7 | 21 |
| 1974 | 103.9 | 12.8 | 12 |
| 1975 | 258.3 | 35.1 | 14 |
| 1976 | 312.4 | 24.2 | 8 |

- Sources:
1. 1954-1968 IBRD/IDA Current Economic Position and Prospects of Guyana, Vol II Agriculture, Appendix, Table 24
 2. 1970-1976 Ministry of Finance
 3. Excludes compensation for Nationalisation, 107.6 million dollars to DEMBA in 1971, 22.3 million to Reynolds in 1975, and 10.3 million to Bookers Ltd in 1976.

TABLE 24 Guyana Rice Production, Acreage and Yields 1946-1975

| Year | Acreage Reaped | Production of Rice in Tons | Paddy Yield per Acre of 140 Bags |
|--------|----------------|----------------------------|----------------------------------|
| (1911) | (38,000) | - | - |
| 1946 | 100,763 | 64,472 | 17.1 |
| 1948 | 93,189 | 59,780 | 17.1 |
| 1950 | 103,016 | 61,743 | 16.0 |
| 1952 | *127,500 | 74,120 | *15.5 |
| 1954 | *143,000 | 88,562 | *16.0 |
| 1956 | 136,000 | 78,500 | 15.4 |
| 1958 | 183,326 | 100,519 | 14.6 |
| 1960 | 220,207 | 126,153 | 15.3 |
| 1962 | 245,973 | 129,924 | 14.1 |
| 1964 | 311,417 | 155,926 | 13.4 |
| 1966 | 308,395 | 159,408 | 12.7 |
| 1968 | 313,135 | 136,690 | 10.7 |
| 1970 | 294,280 | 142,285 | 11.9 |
| 1972 | 196,270 | 94,107 | 11.8 |
| 1974 | 261,180 | 163,000 | 14.8 |
| 1976 | - | 109,000 | - |
| 1978 | - | 180,000 | - |
| 1979 | - | 142,000 | - |

*estimated

- Sources: 1. IBRD/ADA (Central America and Caribbean Dept), Current Economic Position and Prospects of Guyana, Vol II Agriculture, Appendix Table 3
2. Ministry of Agriculture, Resource Development and Planning, Georgetown.

TABLE 25 POPULATION BY PLACE OF BIRTH AND PLACE OF RESIDENCE, 1970. (BOTH SEXES)

| | Total GUYANA | City of Georgetown | Suburbs of Georgetown | East Bank Demerara | East Coast Demerara | West Demerara | Upper Demerara River | West Berbice | New Amsterdam | Rest of Berbice | Essequibo Coast & Is. | Interior Districts | Not Stated |
|-----------------------|--------------|--------------------|-----------------------|--------------------|---------------------|---------------|----------------------|--------------|---------------|-----------------|-----------------------|--------------------|------------|
| City of Georgetown | 60585 | 37730 | 3956 | 852 | 4318 | 3106 | 944 | 1049 | 1570 | 2299 | 3400 | 1361 | 0 |
| Suburbs of Georgetown | 97940 | 25727 | 44152 | 1675 | 7527 | 4552 | 1445 | 1718 | 1963 | 3584 | 4161 | 1436 | 0 |
| East Bank Demerara | 35684 | 2046 | 1979 | 22299 | 2656 | 2843 | 902 | 354 | 218 | 705 | 1395 | 287 | 0 |
| East Coast Demerara | 107518 | 3096 | 2414 | 984 | 93367 | 1936 | 627 | 1537 | 421 | 1750 | 1042 | 344 | 0 |
| West Demerara | 77263 | 1625 | 1073 | 1250 | 2844 | 64955 | 422 | 363 | 230 | 914 | 3200 | 387 | 0 |
| Upper Demerara River | 27839 | 2678 | 744 | 480 | 2450 | 1382 | 14354 | 1892 | 706 | 1473 | 1243 | 437 | 0 |
| West Berbice | 32851 | 292 | 177 | 112 | 1377 | 181 | 158 | 28564 | 289 | 1533 | 1120 | 48 | 0 |
| New Amsterdam | 17303 | 911 | 145 | 78 | 580 | 260 | 91 | 1110 | 10111 | 3734 | 202 | 81 | 0 |
| Rest of Berbice | 132073 | 932 | 422 | 374 | 2674 | 813 | 221 | 2385 | 1646 | 121287 | 549 | 190 | 0 |
| Essequibo Coast & Is. | 56746 | 602 | 361 | 310 | 640 | 2094 | 155 | 111 | 88 | 330 | 51273 | 782 | 0 |
| Interior Districts | 40966 | 1277 | 352 | 185 | 1057 | 717 | 320 | 305 | 202 | 439 | 1887 | 34225 | 0 |
| Not Stated | 736 | 173 | 38 | 19 | 144 | 78 | 26 | 43 | 35 | 89 | 90 | 31 | 0 |
| TOTAL | 686924 | 77089 | 55813 | 28618 | 119604 | 82917 | 19665 | 39431 | 17479 | 138137 | 68562 | 39609 | 0 |

Source: Population Census, 1970, Vol., 5.

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